Manitoba
Innovation, Energy and Mines

Innovation, Énergie et Mines
Manitoba

Annual Report 2012 - 2013	Rapport annuel 2012 - 2013

Manitoba

His Honour the Honourable Philip S. Lee, C.M., O.M.
Lieutenant Governor of Manitoba
Room 235, Legislative Building
Winnipeg, Manitoba
R3C 0V8

May it Please Your Honour:

I am pleased to present the Annual Report for the Department of Innovation, Energy and Mines for the fiscal year ending March 31, 2013.

Respectfully submitted,

Dave Chomiak
Minister

Son Honneur l'honorable Philip S. Lee, C.M., O.M.
Lieutenant-gouverneur du Manitoba
Palais législatif, bureau 235
Winnipeg (Manitoba) R3C 0V8

Monsieur le Lieutenant gouverneur,

J'ai le plaisir de présenter à Votre Honneur le rapport annuel du ministère des Innovation, Énergie et Mines pour l'exercice se terminant le 31 mars 2013.

Je vous prie d'agréer, Monsieur le Lieutenant-gouverneur, l'expression de mon profond respect.

Le ministre,

Document original signé par :

Dave Chomiak

Manitoba
Innovation, Energy and Mines

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Honourable Dave Chomiak
Minister of Innovation, Energy and Mines
Room 343, Legislative Building
Winnipeg MB R3C 0V8

Dear Minister Chomiak:

I have the honour of presenting the Annual Report for the Department of Innovation, Energy and Mines for the period April 1, 2012 to March 31, 2013.

The mission of the department is to help all Manitobans thrive by fostering innovation, enabling critical partnerships and networks, and continuously transforming service delivery.

The department has undertaken many activities in collaboration with our partners and stakeholders. I have profiled below, a few accomplishments that are a result of the activities:

- Manitoba continued to take a leadership position with regard to energy efficiency, enacting the Energy Savings Act in June of 2012. The Act enabled Manitoba Hydro to develop, and implement a province-wide “Pay-As-You-Save” energy efficiency financing program that allows homeowners to borrow money for retrofits and repay the loan through energy and water savings. The Act also requires Manitoba Hydro to submit to Government an annual energy efficiency plan with clear electricity, and natural gas efficiency targets.

- Government has established a public process for Manitoba Hydro to prove, and justify its needs for new electricity generation, and demonstrate that its preferred development plan for the Keeyask and Conawapa dams and associated transmission is superior to alternatives.

- Manitoba and its partners Mitsubishi Heavy Industry, New Flyer Industries, Manitoba Hydro, and Red River College, achieved a first in Canada by completing the development and launch of a “road-ready” all electric, battery transit bus. The electric bus is now ready for limited passenger demonstration and has opened the doors for new markets and business relationship for the private companies involved.

- In close collaboration with the Manitoba Departments of Entrepreneurship, Training and Trade and Advanced Education and Literacy, Science, Innovation and Business Development (SIBD) provided a 2012/13 funding grant of $200,000 to Mitacs in support of the *Accelerate* (graduate internships) and *Elevate* (post-doctoral fellowships) program. Mitacs is a national research network that focuses on providing opportunities for students and postdoctoral fellows to develop their scientific and business skills through a suite of research and training programs.

- In 2012/13, SIBD funding to the Information and Communication Technologies Association of Manitoba (ICTAM) supported the redevelopment of Tech Trek: ICTAM’s ICT Aboriginal Youth Challenge. This program creates pathways to ICT careers for Manitoba’s Aboriginal youth. The program format was updated and revised to enable an increase in participation from 60 to 100 students.

- Business Transformation and Technology's primary focus is to establish an environment that will help modernize government. A renewed and sustainable ICT infrastructure is central to this mission and many of BTT's major projects and initiatives are directed at infrastructure renewal and consolidation. These include:

- BTT has completed the migration to the Manitoba Network. The Manitoba Network will help to serve as a catalyst for the future expansion of broadband and high-speed Internet access services to rural and northern Manitoba communities.

- BTT's focus on modernizing government includes a strategy to rationalize, standardize, and integrate the government's diverse application portfolio of more than 500 applications through the Application Portfolio Management Initiative.

- BTT has taken the lead with government departments to help coordinate a continuous effort to further advance the online services that government offers to the residents of Manitoba. This included the expansion of the use of Online Address Change which allows citizens to update address information to select government programs and utilities; as well as the implementation of the Map Gallery system which provides online Mapping Services.

- In 2012, the Manitoba Geological Survey embarked on a multiyear program to update geological mapping in the northern and central Superior Province, with bedrock mapping at Oxford Lake, and Horseshoe Lake, and Quaternary mapping at Knee Lake. A new bedrock mapping program was also started in the western Flin Flon Belt, in an area that had not been mapped since 1951. Fieldwork continued in the Snow Lake area and the Thompson Nickel Belt (TNB), building on earlier work. New work was undertaken to better define the setting of rare earth elements (in southeastern Manitoba, and southwest of Lynn Lake), and nickel (in the Mayville area of southeastern Manitoba).

- Targeted Geoscience Initiative: work by the Manitoba Geological Survey, partnered with the federal government, universities and the mining industry is providing new information about mineral deposits in a wide range of geological environments in Manitoba. These advances help established mining communities by identifying new targets for private industry exploration, potentially leading to new discoveries.

- The Orphan and Abandoned (O&A) was introduced in 2009 with a dedicated budget to address the rehabilitation of O&A Mines sites. To date, $120 million has been spent, and 25 High Hazard sites have been rehabilitated. Rehabilitation work is underway on all remaining High Hazard Sites and High Risk Sites.

- We continued with development, and enhancement of the Integrated Mining and Quarrying System (IMAQ's) which provides for client administration of Mineral Dispositions for both the Metal Mining, and Quarrying.

- Manitoba has two new mines in the licensing process, HudBay's Lalor and Reed Mines in the Snow Lake area. Mineral Resources Division has provided direct support to a number of successful exploration, and development projects. Continuing indirect scientific support for projects, and others in the development pipeline, will ensure the economic sustainability for northern and Aboriginal communities.

- In 2012 Oil and Gas industry activity continued at a record setting pace with 616 wells drilled. Oil production for 2012 reached 52,404 barrels of oil per day for an annual total of 19.1 million barrels worth an estimated $1.62 billion. Industry invested $1.45 billion employing over 4,400 people, while generating $162 million of direct and indirect provincial revenue including $21.8 million from petroleum royalties, taxes, fees, and Crown oil and gas rights leasing.

- The 2012 Manitoba Mining and Minerals Convention enjoyed record attendance, with over 1,100 delegates attending the Convention.

The department will continue with implementing innovative initiatives and strategic planning that will contribute to Manitoba's success.

Respectfully submitted,

Grant Doak
Deputy Minister of
Innovation, Energy and Mines

Manitoba
Innovation, Énergie et Mines

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Monsieur Dave Chomiak
Ministre de l'Innovation, de l'Énergie et des Mines
Palais législatif, bureau 343
Winnipeg (Manitoba) R3C 0V8

Monsieur le ministre,

J'ai l'honneur de vous présenter le rapport annuel du ministère de l'Innovation, de l'Énergie et des Mines pour la période du 1^er^ avril 2012 au 31 mars 2013.

La mission du ministère consiste à aider la population manitobaine à prospérer en encourageant l'innovation, en permettant la création de partenariats et de réseaux essentiels et en transformant continuellement la prestation de services.

Le ministère a mené de nombreuses activités en collaboration avec ses partenaires et les groupes intéressés. Voici quelques-unes des réalisations qui découlent de ces activités.

- Le Manitoba a continué d'assumer un rôle de chef de file au chapitre de l'efficacité énergétique en promulguant la *Loi sur les économies d'énergie* en juin 2012. La *Loi* autorise Manitoba Hydro à élaborer et à mettre en œuvre, à la grandeur de la province, le programme de financement éconergique PAYS (Pay-As-You-Save), qui permet aux propriétaires de maison d'emprunter de l'argent pour effectuer des rénovations et de rembourser leur prêt à même les économies qu'ils feront sur leurs factures d'énergie et d'eau. La *Loi* oblige aussi Manitoba Hydro à remettre chaque année au gouvernement un plan d'efficacité énergétique qui fixe des cibles claires en ce qui a trait à la consommation d'électricité et de gaz naturel.

- Le gouvernement a établi un processus public en vertu duquel Manitoba Hydro devra démontrer et justifier tout besoin de production supplémentaire d'électricité, et faire la preuve que le plan de développement qu'il préconise pour les barrages Keeyask et Conawapa et le transport d'électricité s'y rapportant surpasse les solutions de rechange.

- Le Manitoba et ses partenaires, Mitsubishi Heavy Industry, New Flyer Industries, Manitoba Hydro et le Red River College, ont réalisé une première au Canada en concevant et en lançant un autobus urbain électrique à batterie fonctionnel. L'autobus électrique est maintenant prêt à prendre un nombre limité de passagers à titre de démonstration tout en ouvrant de nouveaux marchés et des possibilités d'affaires pour les entreprises privées participantes.

- En étroite collaboration avec le ministère de l'Entreprenariat, de la Formation professionnelle et du Commerce et le ministère de l'Enseignement postsecondaire et de l'Alphabétisation, la Division des sciences, de l'innovation et du développement des entreprises a accordé une subvention de 200 000 $ à Mitacs en 2012-2013 afin d'appuyer son programme *Accélération* (stages pour diplômés) et son programme *Élévation* (bourses de recherche postdoctorale). Mitacs est un réseau de recherche national qui cherche à donner aux étudiants et aux stagiaires postdoctoraux des occasions de développer leurs compétences scientifiques et commerciales en suivant une série de programmes de recherche et de formation.

- En 2012-2013, l'aide financière de la Division accordée à la Information and Communication Technologies Association of Manitoba (ICTAM) a assuré la reprise du programme « Tech Trek: ICTAM's ICT Aboriginal Youth Challenge », qui ouvre la voie à une carrière dans les technologies de l'information et des communications pour les jeunes Autochtones du Manitoba. Le programme a été reformulé et mis à jour afin que la participation passe de 60 à 100 étudiants.

- L'objectif principal de la Division de la technologie et de la transformation opérationnelle est de créer un environnement qui aidera le gouvernement à se moderniser. Une infrastructure des technologies de l'information et des communications renouvelée et durable est essentielle à l'atteinte de cet objectif. C'est pourquoi bon nombre des projets et des initiatives d'envergure de la Division visent à renouveler et à consolider l'infrastructure. En voici des exemples :

- La Division a terminé la migration vers le réseau du Manitoba. Ce réseau servira de catalyseur à l'expansion à venir des services d'accès Internet à large bande et à haut débit dans les collectivités rurales et du nord du Manitoba.

- Afin de moderniser le gouvernement, la Division met en œuvre une stratégie visant à rationaliser, à normaliser et à intégrer le portefeuille d'applications diversifié du gouvernement, qui en compte plus de 500, dans le cadre de l'initiative de gestion du portefeuille d'applications.

- La Division a pris l'initiative d'aider à coordonner les efforts soutenus déployés par les ministères dans le but d'améliorer davantage les services en ligne que le gouvernement offre aux Manitobains, dont le changement d'adresse en ligne, qui permet aux gens de mettre leur adresse à jour à l'intention des responsables de programmes gouvernementaux et de services publics donnés; et la mise en place d'un système de galerie de cartes qui fournit des services de cartographie en ligne.

- En 2012, la Direction des services géologiques du Manitoba s'est lancée dans un programme pluriannuel de mise à jour de la cartographie géographique du nord et du centre de la province du Lac Supérieur, qui comprend la cartographie du substrat rocheux à Oxford Lake et Horseshoe Lake, et la cartographie du Quaternaire à Knee Lake. Un nouveau programme de cartographie du substrat rocheux a été créé dans la zone de Flin Flon à l'ouest, dans un secteur qui n'a pas été cartographié depuis 1951. Le travail sur le terrain se poursuit dans le secteur de Snow Lake et dans la ceinture nickélifère de Thompson, qui s'appuie sur des travaux antérieurs. Des travaux ont été entrepris afin de mieux définir la teneur en métal des terres rares dans le sud-est du Manitoba et le sud-ouest de Lynn Lake, ainsi que la teneur en nickel dans le secteur de Mayville au sud-est du Manitoba.

- Initiative géoscientifique ciblée : Les travaux réalisés par Services géologiques Manitoba, en partenariat avec le gouvernement fédéral, les universités et l'industrie minière, fournissent de nouvelles données sur les gisements minéraux dans tout un éventail de milieux géologiques au Manitoba. Ces données sont utiles aux collectivités minières établies, car elles répertorient de nouvelles cibles d'exploration pour le secteur privé et pourraient mener à de nouvelles découvertes.

- Mis en œuvre en 2009, le programme de restauration des mines orphelines et abandonnées du Manitoba dispose d'un budget spécial. Jusqu'ici, 120 millions de dollars ont été dépensés et 25 sites d'exploitation minière jugés très dangereux ont été remis en état. La remise en état de tous les autres sites présentant un danger ou un risque important se poursuit.

- Nous avons poursuivi la mise au point et l'amélioration du Système intégré du secteur des mines et des carrières (iMaQs), afin de permettre aux clients des secteurs de l'extraction des métaux et de l'exploitation des carrières d'administrer des aliénations minières.

- Le Manitoba est engagé dans le processus d'octroi de permis à deux nouveaux projets miniers (HudBay Lalor et Reed) dans la région de Snow Lake. La Division des ressources minières a fourni un soutien direct pour un certain nombre de projets d'exploration et de mise en valeur qui ont été couronnés de succès. La poursuite du soutien scientifique indirect pour ce type de projets ainsi que pour d'autres projets en voie d'élaboration assurera la viabilité économique des collectivités du Nord et des collectivités autochtones.

- En 2012, l'industrie pétrolière et gazière a continué de battre des records en forant 616 puits. La production pétrolière a atteint 52 404 barils par jour, pour un total annuel de 19,1 millions de barils dont la valeur est estimée à 1,62 milliard de dollars. L'industrie a investi 1,45 milliard de dollars et embauché plus de 4 400 personnes, ce qui a permis de dégager 162 millions de dollars en recettes provinciales directes et indirectes, dont 21,8 millions de dollars tirés des redevances pétrolières, des taxes, des droits et de la location des droits d'exploitation pétrolière et gazière.

- En 2012, le congrès sur les mines et les minéraux du Manitoba a attiré une foule record, avec plus de 1 100 délégués présents.

Le ministère continuera de promouvoir la planification stratégique et les initiatives innovatrices qui contribueront au succès du Manitoba.

Je vous prie d'agréer, Monsieur le Ministre, l'assurance de ma haute considération.

Le sous-ministre de l'Innovation, de l'Énergie et des Mines,

Grant Doak

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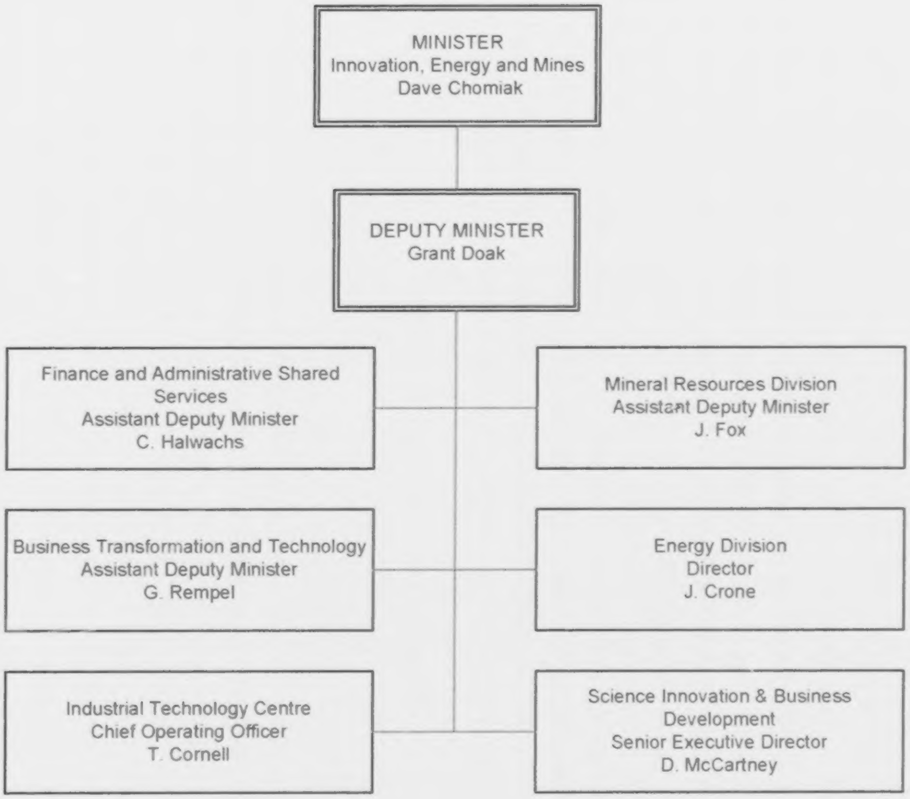
Schedule 1

INNOVATION, ENERGY AND MINES
ORGANIZATION CHART
As of March 31, 2013


MINISTER
Innovation, Energy and Mines
Dave Chomiak
DEPUTY MINISTER
Grant Doak
Finance and Administrative Shared Services
Assistant Deputy Minister
C. Halwachs
Mineral Resources Division
Assistant Deputy Minister
J. Fox
Business Transformation and Technology
Assistant Deputy Minister
G. Rempel
Energy Division
Director
J. Crone
Industrial Technology Centre
Chief Operating Officer
T. Cornell
Science Innovation & Business Development
Senior Executive Director
D. McCartney

PREFACE

REPORT STRUCTURE

The Annual Report is organized in accordance with the department's appropriation structure and the Main Estimates of Expenditure for the Province. The Report includes financial performance and variance information at the main and sub-appropriation levels and information relating to the department's objectives and results at the sub-appropriation level. The Report also includes information about associated agencies, business assistance, revenue and expenditures, a five-year comparison of expenditures and a staffing analysis.

STATUTORY RESPONSIBILITIES

The Minister of Innovation, Energy and Mines is responsible for the following:

The Biofuels Act	B 40
The Economic Innovation and Technology Council Act	E 7
The Energy Act	E 112
The Energy Savings Act	E 115.5
The Gaming Control Act	G 5
The Gaming Control Local Option (VLT) Act	G 7
The Gas Pipe Line Act	G 50
The Gas Allocation Act	G 52
The Greater Winnipeg Gas Distribution Act (S.M. 1988-89, c. 40)	-
The Manitoba Health Research Council Act	H 28
The Manitoba Hydro Act	H 190
The Manitoba Natural Resources Development Act	N 33
The Income Tax Act (section 10.5)	I 10
The Innovation Funding Act	I 37
The Mines and Minerals Act	M 162
The Mining and Metallurgy Compensation Act	M 190
The Oil and Gas Act	0 34
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The Property Tax and Insulation Assistance Act [Part V, and section 1 and Part VI as they relate to subjects covered under Part V]	P 143
The Renewable Energy Jobs Act	R 85
The Surface Rights Act	S 235
The Thompson Nickel Belt Sustainability Act	T 58

As per Order-In-Council 382/2012

SUSTAINABLE DEVELOPMENT

The department is committed to the Principles and Guidelines set out in The Sustainable Development Act and works to incorporate them in department activities, programs and business practices.

The Principles and Guidelines of Sustainable Development are:

1. Integration of Environmental and Economic Decisions
2. Stewardship
3. Shared Responsibility and Understanding
4. Prevention
5. Conservation and Enhancement
6. Rehabilitation and Reclamation
7. Global Responsibility
8. Efficient uses of Resources
9. Public Participation
10. Access to Information
11. Integrated Decision Making and Planning
12. Waste Minimization and Substitution
13. Research and Innovation.

The Sustainable Development Procurement Goals:

1. Education, Training and Awareness
2. Pollution Prevention and Human Health Protection
3. Reduction of Fossil Fuel Emissions
4. Resource Conservation
5. Community Economic Development

ORGANIZATION

The department's 2012/2013 organization structure is illustrated in the Organization Chart, page i. The roles, responsibilities and staffing are outlined in the following information.

ROLE AND RESPONSIBILITIES

MINISTER

HONOURABLE DAVE CHOMIAK

DEPUTY MINISTER

GRANT DOAK

VISION STATEMENT

Manitoba is the place where innovation flourishes, ideas grow and people prosper.

ROLE AND MISSION

The department will build the capacity for Manitobans to prosper through innovation, by

- creating strategic partnerships;
- encouraging investment;
- enabling the right infrastructure, and access to it;
- promoting awareness and knowledge;
- championing critical policy development; and
- facilitating development of the province's energy and mineral resource and knowledge-based economy.

FOCUS

The Department will:

- focus provincial innovation activities;
- assist in the growth and success of our science, research and technology assets;
- foster a positive environment to enable economic development opportunities related to energy initiatives;
- strengthen, develop, grow and attract knowledge-based industries;
- focus government's business transformation and information technology requirements;
- build community based partnerships through connectivity;
- strategically develop Manitoba's energy resources, in co-operation with public and private sectors;
- support innovation in communities and schools;
- link government's own IT activities with innovation and economic development;
- provide geoscientific information vital to address land-use and environmental issues facing Manitobans; and
- provide for and encourage the environmentally friendly sustainable economic development of the province's mineral and petroleum resources.

The Department will work collaboratively with business, individuals, government departments and communities to:

- strengthen their capacity to innovate;
- enhance the competencies they need to prosper;
- raise their profile locally, nationally and internationally; and
- foster an environment that supports sustainable economic growth.

To achieve its mission, the department is organized in five divisions:

ADMINISTRATION AND FINANCE DIVISION provides for the executive management, planning and control of departmental policies and programs. Administrative support is provided through the Department of Entrepreneurship, Training and Trade in the areas of finance and administration and management information systems.

ENERGY DIVISION develops and implements energy development initiatives and economic development strategies involving hydro-electric resources and alternate energy development opportunities. This includes developing, monitoring and co-ordinating the implementation of energy-initiatives and related provincial programs.

SCIENCE, INNOVATION AND BUSINESS DEVELOPMENT DIVISION (SIBD) functions as the government's primary focus for business development services to industry and communities in the areas of life sciences, information and communication technologies, and digital media, in support of economic and employment growth. Develops, analyzes and communicates policies related to innovation, research and development, technology and telecommunications. SIBD oversees the implementation of the Manitoba Research and Innovation Fund and the Manitoba Centres of Excellence Fund, provides a co-coordinating function for research, innovation, science and technology initiatives in government. Manitoba Health Research Council: Promotes and assists basic, clinical and applied research in the health sciences in Manitoba through grants and awards programs. Industrial Technology Centre: Facilitates economic development in Manitoba through the provision of industrial technology services. Manitoba Education, Research and Learning Information Networks: Facilitates and co-ordinates the delivery of technology services to the education community across Manitoba.

BUSINESS TRANSFORMATION AND TECHNOLOGY DIVISION provides leadership for service delivery activities, operational transformation activities and the SAP implementation across the Government of Manitoba ensuring the best possible use of the province's existing information and communications technology resources, systems, platforms, applications, and skills, while finding new ways to meet service challenges, plan for future needs, and respond to economic opportunities. Legislative Building Information Systems: Provides a secure technological environment with highly responsive support services and reliable systems that address business requirements of diverse users in the Legislative Building

THE MINERAL RESOURCES DIVISION promotes wise land management and environmentally sustainable economic development in the province based on Manitoba's mineral and petroleum resources; provides authoritative documentation of the province's mineral and petroleum endowment and development potential; delivers mineral incentive programs; administration of legislation governing the disposition of mineral and petroleum rights, exploration, development and production of Manitoba's mineral and petroleum resources and, the rehabilitation of mines, quarries and abandoned petroleum sites; provides for the resolution of disputes between surface and/or mineral rights holders with respect to accessing minerals including oil and gas.

ADMINISTRATION AND FINANCE

The Administration and Finance Division comprises the Executive Support Offices and the shared Financial and Administrative Services section of Entrepreneurship, Training and Trade.

MINISTER'S SALARY AND EXECUTIVE SUPPORT

Executive Support includes the Offices of the Minister and Deputy Minister. The Minister provides leadership and direction to ensure the goals and objectives of the department are accomplished. The Office of the Deputy Minister provides the Minister with advice and information regarding issues and matters of concern to the department. Executive Support is responsible for providing the department with policy direction and the overall planning and co-ordination of departmental activities.

18-1(a) Minister's Salary

Expenditures by Sub-Appropriation	Actual 2012/13 $	Estimate 2012/13 FTE	Estimate 2012/13 $	Variance Over (Under)	Expl. No.
Minister's Salary	37	1.00	37	-	
Total Expenditures	**37**	**1.00**	**37**	**-**	

18-1(b) Executive Support

Expenditures by Sub-Appropriation	Actual 2012/13 $	Estimate 2012/13 FTE	Estimate 2012/13 $	Variance Over (Under)	Expl. No.
Total Salaries & Employee Benefits	485	6.00	492	(7)	
Total Other Expenditures	69		73	(4)	
Total Expenditures	**554**	**6.00**	**565**	**(11)**	

ADMINISTRATION AND FINANCE

FINANCIAL AND ADMINISTRATIVE SERVICES

Financial and Administrative Services is comprised of two primary components: Finance and Administration and Computer Services. The branch provides shared Financial, Administrative and Computer Services to the departments of Entrepreneurship, Training and Trade and Innovation, Energy and Mines.

Human Resource Management
Effective March 1, 2010 the Government of Manitoba realigned responsibility for the delivery of human resource services and the associated staff to the Civil Service Commission, with the goal to improve service delivery to all departments and employees. For additional information on this realignment, see the Civil Service Commission's 2010/11 Annual Report

OBJECTIVES

The objectives of Financial and Administrative Services are to: provide leadership, program direction and operational coordination to support department activities; to provide high quality, timely and customer responsive administrative, financial management and information technology, develop and administer appropriate administrative and financial standards, policies and procedures; and to develop and maintain appropriate reporting systems to provide timely and accurate decision-making information to senior management in the departments and in central agencies through a centralized support service.

ACTIVITIES/RESULTS

Finance and Administration supports the mission and goals of the Department by:

- Processing payments and receipts;
- Providing computer business application development and support services;
- Administering and coordinating the Department's parking and pool vehicle programs;
- Providing for physical accommodations;
- Providing advisory and specialized accounting and financial management services to departmental personnel and related entities;
- Coordinating French Language services;
- Coordinating the departmental administration of the *Freedom of Information and Protection of Privacy Act* and *The Public Sector Disclosure (Whistleblower Protection) Act*;
- Managing the department's records management program; and
- Providing timely, accurate and relevant information to departmental and central agency decision-makers including budgetary, cash flow and year end reporting.

18-1(c) Financial and Administrative Services

Expenditures by Sub-Appropriation	Actual 2012/13 $	Estimate 2012/13 FTE	Estimate 2012/13 $	Variance Over (Under)	Expl. No.
Total Other Expenditures	150		150	-	
Total Expenditures	**150**		**150**	-	

ENERGY DIVISION

The Energy Division's primary responsibilities are to facilitate clean, renewable energy development, develop broad provincial energy policy for both supply and demand side energy activities in Manitoba, and seek economic development opportunities related to energy development and energy efficiency activities.

Manitoba has become a "powerhouse" in terms of clean energy, utilizing renewable resources such water, wind, solar and biomass to produce electricity to power our homes and industry, to fuel vehicles and to heat our houses and buildings. Renewable energy sources like hydroelectricity, wind energy, geothermal, biofuels and biomass cubes and pellets are commercial today, while Manitoba continues to gain experience in the clean energy technologies of tomorrow including electric vehicles and associated infrastructure, fuel cells, advanced energy storage devices, smart grid concepts and devices, advanced low temperature heat pumps and second generation biofuels. Manitoba is also recognized as a North American leader in terms of energy efficiency activities for both electricity and natural gas.

The activities of the division contribute to major capital investments in Manitoba, help Manitoba communities realize new economic opportunities, help reduce harmful greenhouse gas emissions, and contribute to Manitoba becoming more energy self-sufficient.

OBJECTIVES

The primary objectives of the Energy Division include: developing and implementing provincial strategies and programs and providing business development support that facilitates the development of renewable energy sources; developing, analyzing and implementing provincial government's energy policies; providing oversight of existing programs and developing new programs to maximize energy efficiency activities in Manitoba; monitor and analyze global energy trends and promote Manitoba's clean energy trade opportunities in the US and Canada.

ACTIVITIES/RESULTS

The following provides a summary of activities:

Hydro-Electric Developments

The major hydroelectric development in Manitoba was the completion of construction of the 200 megawatt (MW) Wuskwatim dam with first power delivered in June 2012. The station was developed and is owned by the Wuskwatim Power Limited Partnership (WPLP), a legal entity involving Nisichawayasihk Cree Nation (NCN) and Manitoba Hydro. Manitoba Hydro operates the station on behalf of WPLP. Wuskwatim's low-head design resulted in the project creating less than one half of a square kilometre of flooding, all contained within the immediate forebay area.

As a result of Manitoba Hydro's anticipated plans for the construction of the Keeyask and Conawapa dams, Government notified the Utility on January 13, 2011 of its intent to have a public review of the proposed projects using an independent body under a Needs For and Alternatives To (NFAT) process. The NFAT process requires that Manitoba Hydro prove and justify its need for new generation and prove that its preferred development plan is superior to alternatives. Department staff were tasked to provide decision-makers with designs of various potential review panels that could facilitate a thorough, transparent and public review. On November 16, 2012 Government announced that the Manitoba Public Utilities Board (PUB) was chosen to conduct the review.

The Energy Division continued to participate in the inter-departmental Major Hydro Projects Working Group tasked with ensuring major hydroelectric development related permitting processes are coordinated and streamlined.

Division staff are also participating on the steering committees for Crown Consultations with First Nations, Aboriginal and Metis Communities related to the Bipole III transmission line and for the proposed Keeyask generating station project.

Off-Grid Communities

There are 4 First Nations that are not connected to the provincial electricity grid. These communities are all located in the far north of the Province and are all remote and serviced by winter roads. Their electricity is supplied by diesel fired generation and heating needs mainly from home heating fuels. Manitoba has made it a priority to eliminate or reduce the use of fossil fuels for heating and electricity in these communities with renewable energy technology solutions. Department staff have been working on a tri-party working group with Aboriginal Affairs and Northern Development Canada and Manitoba Hydro to seek technically feasible and economically viable solutions. Evaluation of potential solutions is expected to take place in the next fiscal year.

Electricity Reliability

In June of 2009, the Government passed the Manitoba Hydro Amendment and Public Utilities Board Amendment Act (Electrical Reliability) which became effective April 01, 2012. This Act mandates users, owners and operators of electric transmission and the electric generation owners and operators that are connected to the provincial grid to adhere to electric reliability standards. Energy Division staff conducted its first consultation for update of the reliability regulations to the act and is targeting its initial update for October 2013.

Energy Opportunities Office/Manitoba Energy Jobs Fund

The Energy Opportunities Office was established to support companies that can take advantage of hydroelectric projects and other renewable energy projects that are under development in Manitoba. Manitoba Hydro is planning over $20 billion of capital expenditures to develop the Keeyask Generating Station (695 MW), the Conawapa Generating Station (1485 MW) and the Bipole III HVDC transmission line and converter stations.

The mandate of the Energy Opportunities Office is to proactively promote both local business expansion as well as new investment opportunities in Manitoba's growing clean energy economy. Manitoba's clean energy industry includes hydroelectricity generation and transmission, wind energy, solar thermal and photovoltaics, biofuels, electric vehicles, geothermal heating and cooling as well as biomass heating options and energy efficiency programs.

The Energy Opportunities Office also supports the administration of a Manitoba Energy Jobs Fund. The $30 million Manitoba Energy Jobs Fund provides loans to assist Manitoba companies expand and to attract international companies to establish operations in the province in anticipation of new energy projects. The Fund is managed in cooperation with the Financial Services Branch of Manitoba Entrepreneurship, Training and Trade, under The Development Corporation Act.

Manitoba's Clean Energy Strategy

The Department released the Manitoba Clean Energy Strategy in November 2012. Manitoba is already a leader in renewable energy and continues to offer some of the lowest electricity rates in North America. The Clean Energy Strategy recognizes our successes and focuses on building new generation hydro; expanding transmission that improves electricity reliability and security; adding more wind power as economics allow; promoting geothermal, biomass and solar for heating needs; developing our biobased fuels; and leading in new cutting edge electric transportation solutions.
This strategy is consistent with the principles behind Tomorrow Now – Manitoba's Green Plan, which focuses on protecting the environment while ensuring a prosperous and environmentally conscious economy.

Wind Power

Manitoba currently has 258 MW of installed wind capacity located in southern Manitoba. Pattern Energy Group owns and operates the 138 MW St. Joseph wind farm. The project is comprised of 60 wind turbines that can generate enough power to serve the needs of approximately 50,000 homes. Algonquin Power owns and operates the 120 MW St. Leon wind farm. The facility consists of 73 turbines and can generate enough power for over 40,000 homes.

Manitoba established a long term strategic target of 1,000 MWs, equal to 10 per cent of Manitoba Hydro's average annual generation. The location, scale and timing of future utility and community scale wind development in Manitoba will be shaped by circumstances such as exchange rates and export prices, federal support, global turbine prices, rural economic conditions and Manitoba Hydro's evaluation of its supply and demand situation.

The Department continues to provide support to Manitoba communities, First Nations and wind energy companies interested in developing and investing in wind energy projects in Manitoba.

Geothermal Heat Pumps

Geothermal energy continues to broaden its support throughout Manitoba and now includes large commercial developments. In 2012 one of the largest IKEA stores in Canada and an adjacent retail centre came on stream and formed the largest geothermal development in Manitoba. This project includes approximately 700,000 square feet of retail space for 50 to 60 stores, restaurants and financial institutions that will be heated and cooled with renewable geothermal energy. It includes a district geothermal energy system, which is a first for a retail development in Manitoba and is a rarity in North America.

Manitoba's geothermal energy projects were showcased by the QUEST (Quality Urban Energy Systems of Tomorrow) 2012 International Conference. The integrated district geothermal system in Île-des-Chênes, Manitoba, which heats and cools several community buildings including a hockey arena, fire hall, a day care and a 500 seat banquet hall, was a national finalist in the 2012 QUEST Community Energy Builder Competition.

The Manitoba Geothermal Energy Incentive Program, which offers grants and tax credits for eligible installations, is stimulating investment in geothermal and achieving a cleaner, greener environment. Since the incentive program was launched in 2009, more than 1,000 homes and businesses have participated and over $3 million in grants and credits has been distributed. The program has also stimulated over $30 million in geothermal investments by Manitoba homeowners and businesses.

In addition to reducing the use of imported natural gas, along with reducing greenhouse gas emission, the growth of Manitoba's geothermal industry is providing green jobs and significant capital investment to our local economy and helping Manitobans save on their energy costs.

Thousands of Manitobans have chosen renewable geothermal to date and are enjoying the advantages of green heat and cooling in a variety of building types. This includes geothermal installations in office and manufacturing buildings, condominiums, high-rise apartment towers, Hutterite colonies and homes.

Biodiesel

Energy Division staff conducted stakeholder consultations and completed amendments to the Biodiesel in Diesel Fuel Mandate Regulation and the Biodiesel (General) Regulation under *The Biofuels Act* to adjust the duration of the first reporting period and to allow the use of renewable diesel fuel under the 2% provincial biodiesel mandate. These amendments serve to address systemic biodiesel supply issues by providing flexibility to meet the biodiesel mandate. These changes do not reduce the estimated annual 56,000 tonnes of greenhouse gas emission reductions attributed to the biodiesel mandate in Manitoba , and renewable diesel may help to increase the biodiesel mandate in the future because of its diesel-like cold weather properties.

Ethanol

The ethanol mandate resulted in an estimated 340,000 tonnes of greenhouse gas emission reductions in Manitoba for 2012.

Energy Efficiency

To set the stage for continuous improvement in Manitoba's energy efficiency efforts, Energy Division staff worked on The Energy Savings Act, which was enacted in June 2012. This legislation enabled Manitoba Hydro to develop and launch a first-of-its-kind in Canada 'Pay-As-You-Save' (PAYS) financing program for home retrofits. The program:

- provides upfront capital for energy and water efficiency retrofits;
- enables home and building owners to repay that capital over time through energy and water savings on their monthly utility bill; and
- allows the PAYS financial obligation to be attached to the property rather than to an individual, so that the costs are transferable upon sale.

The Energy Savings Act also requires Manitoba Hydro to develop an annual energy efficiency plan that sets energy efficiency targets for both electricity and natural gas and continues the Affordable Energy Fund established under previous legislation. This fund allows Manitoba Hydro to offer comparable incentives and services to its customers to reduce energy bills regardless of family income, location in the province, or type of fuel they use to heat their homes.

Further, to extend the reach of energy efficiency programs and expand training and employment opportunities, the Government and Manitoba Hydro continue to support community groups to retrofit dwellings for lower-income households. To date, approximately 1,800 homes and 6,453 apartment units have been retrofitted by these groups engaging more than 150 trainees.

Plug-in Hybrid Electric Vehicles (PHEVs) and Battery Electric Vehicles (BEV)

The Energy Division made significant progress on various types of electric vehicles. Final reports were issued on the ten-vehicle Manitoba PHEV Demonstration. This project involved fleet-based Toyota Prius hybrids converted to PHEV using technology from A123Systems Inc. and was one of the largest projects of its kind in Canada. In addition to two all-electric Mitsubishi iMiEVs, the Energy Division began operating an all-electric Nissan LEAF, and a Chevrolet Volt PHEV, both for testing and evaluation in a cold climate.

The Energy Division assisted in establishing the Electric Vehicle Technology and Education Centre (EVTEC) at Red River College. The EVTEC does research and evaluation and provides information to the public on the merits and challenges of electric vehicles.

In June 2012, report of the Electric Vehicle Advisory Committee (EVAC) was publicly released. Entitled, "Realizing the Potential of Electric Vehicles in Manitoba," the report covered five major theme areas, and included eighteen major recommended actions to accelerate the adoption of electric vehicles within Manitoba. The Energy Division acted as the chair of the EVAC and provided secretariat support. In October 2012, a presentation was made by Division staff to the EV2012 Conference in Montreal, Quebec, providing an update on activities ongoing in Manitoba.

All-Electric Transit Bus Development and Demonstration

This major international collaboration was first announced by the Premier in April 2011. The $3 million, three-year project involves a partnership among the Government of Manitoba, Mitsubishi Heavy Industries (MHI), Manitoba Hydro, New Flyer Industries and Red River College, and was the first concrete activity under the MOU signed previously in December 2010 with MHI regarding Renewable Energy Development. The Energy Division continued to provide overall coordination of the project. In June 2012, the completed prototype bus was publicly unveiled by the Premier. In addition, with support of other project partners, New Flyer was awarded $3.4 million in new funding from Sustainable Development Technology Canada to expand the demonstration from a single bus to a five all-electric bus full-route pilot, also involving Winnipeg Transit as a partner.

Biomass for Heat

The Energy Division continued to work closely with department of Manitoba Agriculture, Food and Rural Initiatives on biomass fuel for heating applications. Energy staff primarily provided business support in discussions with a variety of interested biomass processors and biomass technology developers, with individual industries in continuing to explore the use of biomass to displace fossil fuels, and in discussions on possible appropriate incentive options for biomass fuels.

Midwest Renewable Energy Tracking System (M-RETS)

Energy Division staff continued to sit on the Board of Directors of this non-profit organisation. Established in 2007 to track the environmental attributes of electricity generated from renewable sources, M-RETS is now registered in the state of Wisconsin as a non-stock, non-profit organisation. M-RETS tracks, verifies and issues Renewable Energy Certificates (RECs), and facilitates their trade so as to encourage renewable energy development in the Midwestern US and province of Manitoba. This mechanism facilitates the export of hydro and wind electricity to participating US jurisdictions.

Canadian Energy Strategy

Energy Division staff participated in the development of a Canadian energy strategy under the direction of the Council of the Federation. On behalf of Canadian provinces and territories, Manitoba Alberta, and Newfoundland and Labrador are co-chairing the development of the strategy which will address three broad areas: (1) energy sustainability and conservation; (2) energy technology and innovation; and (3) delivering energy to people. The strategy is expected to be completed in 2014.

18-2(a) Energy Division

Expenditures by Sub-Appropriation	Actual 2012/13 $	Estimate 2012/13 FTE	Estimate 2012/13 $	Variance Over (Under)	Expl. No.
Total Salaries & Employee Benefits	1,141	10.00	1,005	136	
Total Other Expenditures	721		944	(223)	
Total Expenditures	**1,862**	**10.00**	**1,949**	**(87)**	

SCIENCE, INNOVATION AND BUSINESS DEVELOPMENT

SCIENCE, INNOVATION AND BUSINESS DEVELOPMENT

OBJECTIVES

The main focus of Science, Innovation and Business Development (SIBD) is to provide Manitoba with a comprehensive, integrated and coordinated approach to innovation, research and technology initiatives including:

- research, innovation and technology policy development and coordination;
- coordinating investments to support research and innovation in Manitoba;
- knowledge based industry development and growth;
- building Manitoba's life sciences, ICT and digital media sectors;
- smart community development; and
- extending broadband access across Manitoba.

SIBD's mission is *to promote and enhance a climate of research, innovation and technology development that spurs responsible economic development for the benefit of all Manitobans.* Its objectives are to:

- develop public policy initiatives in support of research, innovation and technology development;
- develop a provincial innovation infrastructure;
- build and strengthen the research and innovation capacity within the province;
- build community capacity for sustained economic development in the new economy;
- build the capacity for new company formation, attraction and growth; and
- coordinate the implementation of public policy initiatives in the areas of research, information technologies, and investments.

PROGRAM AREAS

Research and Innovation Policy

The Research and Innovation Policy Branch of SIBD is responsible for the development, analysis and communication of policies related to research, innovation, science and technology. The Branch oversees the implementation of the Manitoba Research and Innovation Fund, Health Research Initiative, Manitoba Centres of Excellence Fund and funding provided to the Manitoba Health Research Council. The Branch also provides a key co-ordinating function across government for research, innovation, science and technology initiatives.

Business Development

The Business Development Branch of SIBD works with three important knowledge-based industries in Manitoba: the life sciences sector, information and communications technologies (ICT) industry, and interactive digital media sector. The Business Development Branch works with local companies, industry associations, and a variety of other sector stakeholders, in order to create an environment in Manitoba that helps grow knowledge-based companies, commercialize new technologies and products, and attract investment.

Broadband Initiative

The Broadband Initiative works with the private sector and community based organizations to provide high-speed connectivity and Broadband capacity to areas of the province where such services do not currently exist.

ACTIVITIES/RESULTS

RESEARCH AND INNOVATION POLICY

Manitoba Research and Innovation Fund (MRIF)

With a core allocation of $11.3 million in 2012/13, the Manitoba Research and Innovation Fund (MRIF) is the primary vehicle for funding provincial research and innovation in the Department of Innovation, Energy and Mines (IEM). Established in 2003/04, the MRIF has three primary support elements: the Research Fund and the Health Research Initiative (HRI).

The objectives of the MRIF are:

- to increase the capacity of Manitoba's universities, colleges, hospitals and other not-for-profit institutions to carry out important world-class scientific research and technology development through the funding of research projects identified as a priority by the Province;
- to increase Manitoba's capacity for innovation through the support of science and technology awareness, technology commercialization and other strategic initiatives;
- to enhance job creation, economic growth, productivity and competitiveness;
- to encourage collaboration between and within the private sector and research institutions;
- to enhance Manitoba research institutions' abilities to attract and keep world-class researchers and skilled technicians, and to conduct state-of-the-art research; and
- to develop improvements for Manitobans' health, environment, and quality of life.

Research Fund

This program element had a $9.3 million allocation for 2012/13. Its focus is on expanding Manitoba's research capacity, enhancing research infrastructure, enabling research programs, and providing key support to emerging programs in such areas as genomics, proteomics and bioinformatics research.

Projects Funded

In 2012/13, projects approved for funding included the following: Assentworks Facility Accessibility and Services Capability Improvement; Mitacs Programming in Manitoba; and the Centre for Biosafety, Biosecurity, and Medical Countermeasures.

Health Research Initiative (HRI)

HRI funding, totalling $2.0 million was provided to five Manitoba health research centres in 2012/13 to assist in supporting research overhead costs. The program funds were apportioned to each centre according to a formula that has been used consistently since the program's inception in 1996/97. Payments to each HRI participant in 2012/13 were as follows:

CancerCare Manitoba	$ 183,000
Manitoba Institute of Child Health	$ 90,000
Health Sciences Centre	$ 342,000
St. Boniface Hospital Research Centre	$ 277,000
University of Manitoba	$ 1,108,000
Total	$ 2,000,000

Innovation Fund

The Innovation Fund component of MRIF had a funding allocation of $450,000 dollars in 2012/2013. The Innovation Fund assists in the implementation of identified strategic Manitoba Government innovation priorities. Funding in this stream is catalytic, supports the broader industry in developing their innovation structures, and promotes economic development by leveraging and expanding research capacity and assisting with technology commercialization.

In 2012/13, Innovation Fund support was provided to two departmental initiatives: E-Index and Broadband Connectivity.

Manitoba Centres of Excellence Fund (MCEF)

The Manitoba Centres of Excellence Fund (MCEF) is the Manitoba Government's research and development support mechanism for Manitoba based researchers who have been successful under the Federal Government's Networks of Centres of Excellence (NCE) initiative. One of the highlights under this initiative is the knowledge mobilization network called "Translating Emergency Knowledge for Kids (TREKK)". It's based in Manitoba, and led by Dr. Terry Klassen, Director of Research, Manitoba Institute for Child Health. The mission of TREKK is to create a national network that is a trusted source for easy access to the latest evidence, best practices, user-friendly resources and discussions in pediatric emergency care. The network will be created and used by health professionals and the families they care for and its work will drive the highest quality of health care for children and families seeking emergency care in Canada. The MCEF supports Manitoba researchers' leadership and participation in this network, alongside other NCE initiatives.

During 2012/13, MCEF support of $720,000 leveraged a total of $2,031,277 in federal funds from the NCE program. The following University of Manitoba projects were supported:

- Allergy, Genes and Environment Network (AllerGen);
- ArcticNet;
- BioFuel Net;
- Canadian Arthritis Network (CAN);
- Canadian Water Network (CWN);
- Carbon Management Canada Network;
- Canadian Stroke Network (CSN);
- Geomatics for Informed Decisions (GEOIDE);
- Graphics, Animation and New Media Canada (GRAND);
- Marine Environmental Observation Prediction and Response (MEOPAR Network);
- Mprime
- NeuroDevNet;
- PrioNet Canada;
- Technology Evaluation in the Elderly Network (TVN);
- The Automobile of the 21st Century (Auto21);
- TRanslating Emergency Knowledge for Kids (TREKK); and
- Intelligent Sensing for Innovative Structures (ISIS) – ISIS Canada Resource Centre.

Science and Technology International Collaboration Fund (STIC)

In 2007/08, the STIC Fund was launched to support international collaborative research projects with the potential to generate commercial activity and economic benefit for the Province of Manitoba. Each year, $1.0 million is set aside from the Research component of MRIF to support research and development initiatives with researchers beyond Canada's borders.

New collaborative research projects funded through the STIC Fund in 2012/13 included:

- Dr. Peter Jones – Optimizing Human Health Properties of Crops for a Changing Climate ($105,717)
- Dr. Grant Pierce – CanUSA Collaborative Cardiovascular Research Program ($37,500)

The remaining 2012/13 STIC funding was used to support multi-year research projects approved in previous years.

Manitoba Health Research Council (MHRC)

In 2012/13, the Department transferred $6,002,600 in funding to the Manitoba Health Research Council to support research grants and personnel awards, which MHRC in turn provided to the research community and for the administration of the Council. This funding also helped in the implementation of the *Envisioning the Future* strategic plan developed by the Council.

The MHRC's new strategic direction is based upon four action areas which will increase the strength and capacity of the health research community in Manitoba:

- Establish MHRC as the coordinating body for health research in Manitoba;
- Develop, recruit and retain the best research faculty;
- Facilitate research networks, linkages and communication; and
- Move research evidence into practice.

In 2012/13, the Council approved funding of 2 Manitoba Research Chairs, 9 Establishment Grants, 6 Operating Grants, 12 Postdoctoral Fellowships, 1 Clinical Fellowship, 2 Dissertation Awards, 40 Graduate Studentships, 2 Bridge Funding Awards and many second and third year awards from previous competitions.

Manitoba Research Chairs are funded for five years, Establishment Grants provide funding for three years, and the Operating Grants, Fellowships and Studentships provide funding for two years.

MHRC funding provided by Innovation, Energy and Mines was supplemented with support from the MHRC's 2012/13 Coordinated Studentship Funding Partners. These partners included: CancerCare Manitoba Foundation; Health Sciences Centre Foundation; Manitoba Institute of Child Health; The St. Boniface Hospital and Research Foundation; The Terry Fox Research Institute; University of Manitoba - Faculty of Graduate Studies; University of Manitoba - Faculty of Pharmacy and University of Manitoba - Faculty of Dentistry. MHRC also partnered with the Canadian Institutes of Health Research on the Regional Partnership Program. MHRC's partnership programs leveraged in excess of $1.68 million in external funding.

The following individuals were members of the MHRC Board of Directors in 2012/13:

Dr. Brian Postl, Professor and Dean, Faculty of Medicine, University of Manitoba (Chair)
Dr. Arnold Naimark, Director, Centre for the Advancement of Medicine (Vice-Chair, April 2012-October 2012)
Dr. Judith Bartlett, Associate Professor/Adjunct Scientist, Manitoba Centre of Health Policy, Department of Community Health Sciences, Faculty of Medicine, University of Manitoba
Mr. Bob Brennan, Former President and CEO (retired), Manitoba Hydro (Secretary Treasurer, Beginning November 2012)
Ms. Jan Currie, Former Vice-President and Chief Nursing Officer (retired) for the Winnipeg Regional Health Authority
Mr. Robert Gannon, Immediate Past Chair, St. Boniface General Hospital Board (Secretary Treasurer, April 2012-October 2012)
Mr. Ray Hoemsen, Director, Applied Research and Commercialization, Red River College (April 2012-October 2012)
Dr. Digvir Jayas, Vice-President, Research and International, University of Manitoba (Vice-Chair, Beginning November 2012)
Mr. Kevin Kavanaugh, Past President, Great-West Life Co.
Dr. John Langstaff
Dr. Susan McClement, Associate Professor, Faculty of Nursing, University of Manitoba Research Associate, Manitoba Palliative Care Research Unit, CancerCare Manitoba
Dr. Peter Nickerson, Associate Dean, Research, University of Manitoba
Ms. Cathy Nieroda, Vice-President, HP Enterprise Services
Dr. Ian Smith, Director General, National Research Council Institute for Biodiagnostics (April 2012-October 2012)
Dr. Barbara L. Triggs-Raine, Professor, Biochemistry and Medical Genetics, University of Manitoba
Ms. Arlene Wilgosh, President and CEO, Manitoba Regional Health Authority

Ex officio:
Mr. Grant Doak, Deputy Minister, Department of Innovation, Energy and Mines
Mr. Milton Sussman, Deputy Minister, Department of Health

Additional information is available in the MHRC Annual Report.

BUSINESS DEVELOPMENT

Information and Communications Technologies (ICT) and Digital Media

Business Development activities for the ICT and Digital Media sectors for 2012/13 were focused in the following areas:

1. Creating an Environment Fostering ICT and Digital Media Business Development
2. Increasing ICT and Digital Media Research and Technology Commercialization
3. Raising the Profile of Manitoba's ICT and Digital Media Sectors Locally and Internationally

1. Creating an Environment Fostering ICT and Digital Media Business Development

In 2012/13, SIBD worked closely with the Information and Communication Technologies Association of Manitoba (ICTAM) and New Media Manitoba (NMM), in order to promote and grow our local ICT/Digital Media industries and companies:

Information and Communication Technologies Association of Manitoba (ICTAM)

ICTAM is an industry-focused association whose goal is to accelerate the growth, prosperity and sustainability of the ICT industry through relevant programming, advocacy and collaboration. As a not-for-profit, membership based association; ICTAM's constituency is broadly based, encompassing vendors, consumers, government, education, chambers of commerce and sector councils. As information and communication technologies are enabling every facet and type of business, ICTAM assists member companies in achieving greater success through human capital development programs, networking events, conferences, cost-saving benefits and promotional marketing opportunities

SIBD provided $100,000 in 2012/13 to support numerous projects related to international market access for ICT firms, the development of a skilled and sustainable ICT workforce, the enhancement of digital technology adoption across sectors, as well as the development of a three year Economic Development Strategy for the ICT sector. Some of the 2012/13 projects undertaken with SIBD support included:

- The redevelopment of Tech Trek; ICTAM's ICT Aboriginal Youth Challenge. This program creates pathways to ICT careers for Manitoba's Aboriginal youth. The program format has been updated and revised to enable an increase in participation from 60 to 100 students.
- The execution of six learning events geared to enhancing technology adoption across Manitoba's economy.
- The development of six videos to promote Manitoba ICT firms and expertise.
- The completion of a three-year Economic Development Strategy for the ICT sector.

New Media Manitoba (NMM)

NMM is a non-profit association of industry professionals that provides business development support and training to new media companies and entrepreneurs in Manitoba. Comprised of over 1,100 individual members, NMM aims to improve the availability of skilled new media workers in Manitoba; promote the sector both locally and nationally/internationally; improve the Manitoba business environment for new media businesses; and increase local new media firms' access to other strategic and emerging vertical markets.

SIBD provided $25,000 in 2012/13 to support the completion and launch of a new industry profile and strategic plan for Manitoba's Digital Media sector. The initiative will enable NMM to enhance local awareness and penetration of the Digital Media industry, and to develop strategic partnerships that support the growth of Manitoba new media firms.

Financial Assistance Programs Supporting Commercialization

In concert with Manitoba Entrepreneurship, Training and Trade, SIBD continues to work with technology-based companies to provide support for commercialization and business development. In 2012/13, 25 ICT/Digital Media companies and organizations received support through the Commercialization Support for Business Program (CSB) totalling $540,649.

Manitoba Interactive Digital Media Tax Credit (MIDMTC)

The MIDMTC was introduced in 2008/09 to stimulate investment and job creation in Manitoba's digital media industry. The MIDMTC is a fully refundable, 40% corporate income tax credit for companies that develop eligible interactive digital media products here in the province. In 2012/13, SIBD worked with local companies and new media industry stakeholders to advance needed changes to the MIDMTC program. These changes will enable the MIDMTC to keep pace with the changing needs of industry, and positions Manitoba as one of the most competitive provinces in Canada for Digital Media development.

2. Increasing ICT and Digital Media Research and Technology Commercialization

Business Incubation

SIBD continued to be actively involved with two technology business incubation projects - The Eureka Project at Smartpark and Biomedical Commercialization Canada (BCC).

- **The Eureka Project** is a technology incubator focused on the priority sectors of information technology and wireless communication, advanced manufacturing and materials, functional foods and nutraceuticals and ag-biotech. Located at the University of Manitoba Smartpark, the incubator's objective is to provide the space, management expertise and resources for the successful development of high technology start-up companies in Manitoba. SIBD continues to work with the program in an advisory capacity and provided a $200,000 contribution in 2012/13 under the Commercialization Support for Business Program to support the continued operation of the incubator.

- **BCC** is a private sector, not-for-profit organization located at the Centre for Commercialization of BioMedical Technology. It provides a host of resources and people to help early-stage science and technology companies enter the market, secure investment and/or pursue their acquisition strategy. BCC assists its clients in the areas of: facilities and infrastructure, mentoring, coaching and participation, and finance and investment. SIBD continues to work closely with the program and provided a $200,000 contribution in 2012/13 under the Commercialization Support for Business Program to support the continued operation of the incubator

TRTech

TRTech is Canada's largest ICT research and innovation consortium, with an important node of activity based in Winnipeg. The mission of TRTech is "Growing Industry through ICT Innovation" with a vision that TRTech be recognized as Canada's leading ICT innovator for emerging opportunities". The main focus of TRTech is solving Information and Communications Technologies' (ICTs) related challenges by bringing academics and students from Canada's universities together with their industry members to collaborate on projects. TRTech's' engagement is in all aspects of the innovation process, from developing and testing pre-commercial technology to providing highly tailored training of highly qualified personnel (HQP). The Government of Manitoba announced a five-year funding agreement worth $2.6 million with TRTech in April 2011, and provided $480,000 against this commitment in 2012/13.

SIBD continued to work actively with TRTech in Manitoba to explore ways of increasing the number of applied research and commercialization projects undertaken with local Manitoba companies. During 2012/13, TRTech's Winnipeg office attracted $574,000 from industry members and non-members in support of their activities. In addition to membership revenues, members contribute in-kind by way of assigning staff to work jointly on projects, and on some occasions supply hardware and software for the projects. The aggregate in-kind amount totalled $221,000 based on 2012/13 member contracts. In terms of technology output activities in 2012/13, TRTech performed 68 opportunity assessments, 13 technology assessments, 9 prototypes, and supported 4 commercialized products for release in Canadian and international markets.

Innovation, Energy and Mines provided support for the annual Community Dinner on November 15, 2012 at the Park Cafe, Assiniboine Park. The event was co-hosted with ICTAM and was a success, with 141 representatives present from the ICT community in Manitoba. A highlight for TRTech in 2012/13 was the continued growth of activities under their ICT Security Ecosystem program. The goal of the ICT Security Program is to create an environment where ICT security knowledge can be developed and ultimately commercialized by participating industry partners. To accomplish this goal, the ICT Security Program supports a balance of applied research and development activities, along with new technology innovation activities that drive technology commercialization. The program has grown to include four members who are jointly working on ICT security projects. In 2012/13, one of the program's projects attracted a $550,000 grant (over three years) through the federal Canadian Safety and Security Program.

3. Raising the Profile of Manitoba's ICT and Digital Media Sectors Locally and Internationally

2012 World Congress on Information Technology and Mobile World Congress 2012

The 2012 World Congress on Information Technology (in Montreal) and the 2012 Mobile World Congress (in Barcelona) are among the world's leading information technology and mobile media conferences. They bring together more than 73,000 business and research leaders from around the world and across a variety of industries (including healthcare, transportation, communications, energy, education and more). Ten Manitoba companies participated in these two international events, and received valuable business development support and exposure through business-to-business (B2B) matching activities, Manitoba booth space, and a Manitoba dinner event.

2012 Game Developers Conference

The Game Developers Conference (GDC) is the world's largest professionals-only gaming industry event. Held in San Francisco each year, it attracts roughly 20,000 attendees and is the primary forum where Digital Media entrepreneurs, investors, and other industry development stakeholders gather to do business and exchange ideas.

Manitoba's GDC 2012 delegation comprised nearly 30 participants, representing 11 companies, one academic institution and three industry development organizations. As part of Manitoba's participation in GDC 2012, companies participated in high-level business-to-business (B2B) matching meetings, pre-conference training, and were profiled at Canada reception and Manitoba dinner events. The Manitoba delegates indicate that their participation in GDC 2012 is expected to generate $3.5 million in new investment to Manitoba's Digital Media sector.

E-Index

SIBD worked closely with government and community stakeholders to advance "E-Readiness" in Manitoba communities as defined by the assessment of community, organizational and individual capacity to fully participate in the knowledge based economy through the utilization of appropriate skills and infrastructure. This assessment is enabled by a made-in-Manitoba tool called the E-Index. The E-Index provides information on four elements; a community's level of technological infrastructure, the population's skill level, the utilization of technology as well as the community's capacity to afford technology. A community's capacity across these four elements can be directly correlated to their ability to achieve and maintain competitiveness as communities evolve from traditional to knowledge based economies.

In 2012/13, IEM supported assessment for 5 Manitoba communities – Sagkeeng First Nation, Roseau River Anishinabe First Nation, and the Rural Municipalities of St. Pierre, St. Claude and Desalaberry. Final reports and a strategic plan based on the outcomes of the assessment in each community are expected in 2013/14.

Life Sciences

In the life sciences sector, SIBD worked with key stakeholders on initiatives in the biomedical, health biotech, and agricultural biotech sectors that led to increased economic activity in the province.

Activities in 2012/13 were primarily focused on three priorities:

1. Creating an Environment Fostering Life Science Industry and Business Development
2. Increasing Life Science Research and Technology Commercialization
3. Raising the Profile of Manitoba's Life Science Sector Locally and Internationally

1. Creating an Environment Fostering Life Science Industry and Business Development

In 2012/13, SIBD worked closely with the Life Science Association of Manitoba (LSAM) in order to promote and grow our local life science industry and companies:

Life Science Association of Manitoba (LSAM)

LSAM represents Manitoba's growing life sciences sector. The Association's objectives are to coordinate activities to address member needs and concerns and to inform members of changes in the global biotech industry. The current LSAM mandate focuses on four pillars, namely to:

1. Facilitate synergies in the life science industry through connecting people, information and ideas;
2. Support the development of Manitoba's human resource capacity;
3. Strengthen the business environment for members; and
4. Provide a voice for the life science industry in Manitoba.

SIBD provided $100,000 in 2012/13 to support numerous strategic sector development projects. These included:

- The completion of a comprehensive industry survey to profile the sector and critical issues for its ongoing growth and development.
- The development of videos and other digital products/strategies to promote the local life science industry locally and internationally.
- The coordination of a series of industry development events in conjunction with National Biotechnology Week 2012—which included sector tours for over 200 Manitoba students from nine schools across the province.
- The organization of a Manitoba Diabetes Summit, which included leading representatives from industry, research institutions, government partners, and patient groups (both locally and internationally).

Financial Assistance Programs Supporting Commercialization

As noted above, in concert with Manitoba Entrepreneurship, Training and Trade, SIBD continues to work with technology-based companies to provide support for commercialization and business development. In 2012/13, the Commercialization Support for Business Program (CSB) supported 14 Life Science applications totalling $958,709.

2. Increasing Life Science Research and Technology Commercialization

Composites Innovation Centre (CIC)

The Composites Innovation Centre Manitoba Inc. (CIC) was incorporated in October 2003 as a not-for-profit corporation with the goal of stimulating economic growth by facilitating innovative technology and product development involving advanced composite materials. The organization provides technology-solutions for companies producing or repairing composite products with a focus on aerospace, bio-composites, ground transportation and civil infrastructure. To achieve its development mandate, the CIC uses key core technical capabilities and knowledge gleaned from a large national /international network of research and commercialization organizations. The organization also supports education and training initiatives aimed at ensuring the availability of people with critical skills for industry.

SIBD provided $30,000 in 2012/13 to support numerous programs related to research collaborations to accelerate the growth, prosperity and sustainability of bio-product across five jurisdictions. This year, program funding supported the initiation of collaborations for:

- CRC-ACS Project 1.1: Plant Fibre Biocomposites led by Dr. Simon Potter, Composites Innovation Centre Inc. and Dr. Andrew Beehag, Cooperative Research Centre – Advanced Composite Structures, Victoria, Australia. This funding will sustain the project over two years.

Manitoba Agri-Health Research Network (MAHRN)

Since 2007 MAHRN has been a portal to the Province's nationally and internationally recognized centres involved in the commercialization of agricultural products for improved health. Manitoba's agri-health sector is home to three leading edge facilities that work closely with industry to research and develop functional foods and nutraceuticals: Canadian Centre for Agri-food Research in Health and Medicine, Richardson Centre for Functional Foods and Nutraceuticals, and the Food Development Centre. MAHRN has been integral in the development of key industry and research linkages with partners in the European Union, Chile, Australia and Minnesota. In 2012/13, IEM provided MAHRN with $75,000 in support of international projects and priorities.

3. Raising the Profile of Manitoba's Life Science Sector Locally and Internationally

2012 International Biotechnology Convention and Exhibition

Each year, the Biotechnology Industry Organization (BIO) hosts the world's premier biotechnology conference, bringing together scientists, entrepreneurs and innovators from around the world. Held in Boston, MA, BIO 2012 brought together over 16,000 industry leaders from 49 states and 65 countries to discuss and share the latest developments and most pressing issues facing the biotech industry.

In 2012/13, approximately 35 Manitoba delegates attended BIO and showcased the province's life science industry capabilities at a number of key events—including a joint Manitoba-Minnesota business partnering reception and a Manitoba BIO Breakfast. Manitoba's presence at the 2012 International BIO Convention enhanced the profile of our local life sciences sector both nationally and internationally.

Life Science Alley (LSA) Conference 2012

The LSA Conference & Exhibition is an annual event hosted by Minnesota's LifeScience Alley® and the BioBusiness Alliance of Minnesota (LSA/BBAM). The Province of Manitoba—in partnership with the Life Science Association of Manitoba (LSAM)—led a delegation to LSA 2012 in Minneapolis, MN. Manitoba's participation in this event builds upon the ongoing commitment by Manitoba and Minnesota to establish a life sciences corridor between the two jurisdictions—as articulated in a 2004 MOU for biosciences and life sciences collaboration.

Manitoba's involvement at the 2012 LSA Conference included a delegation of 17 participants representing four companies, two research institutes, and three industry and economic development associations. As a result of Manitoba's participation in the 2012 LSA Conference, local companies were able to develop key networks and strategic linkages. Eighteen quality contacts were made, ten new connections were identified, and five non-disclosure agreements were signed.

Research Investment Tours

Over the past year, SIBD and LSAM have been actively engaged in bringing industry to Manitoba—with the intent of attracting research and development (R&D) investment to the province. In 2012/13, SIBD hosted four delegations, which brought representatives from across Canada to Manitoba in search of opportunities for investment. This has created new opportunities for our local life science companies and research institutions.

BROADBAND INITIATIVE

Since its creation in September 2001, the Broadband Initiative has been active in promoting partnerships with community based organizations and the private sector to provide broadband or high-speed Internet access to communities where that service did not exist. The Province's vision is to utilize high speed Internet connectivity to secure economic and social benefits available through the use of information and communications technologies for the benefit of Manitobans.

The Initiative has supported activities undertaken by Industry Canada's Broadband for Rural and Northern Development (BRAND) Program. This $150 million National initiative announced in September 2002, has provided 118 Manitoba communities with a total of $6.6 million in matching funds to enable the creation of broadband networks throughout the province.

In July of 2004 the province's new Broadband Strategy entitled "Connecting Manitobans" was approved. The strategy's main objective is to ensure that all communities in Manitoba have access to broadband or high speed network services by 2010. In order to help attain this goal, the Municipal Rural Infrastructure Fund (MRIF) has, since June 2005, allocated $7.5 million to community based telecommunications infrastructure construction, thereby allowing a further 67 Manitoba communities to benefit from accessing Broadband networks.

In 2010/11 IEM also piloted the Adoption of Technology for Economic Change (A-TEC) in Waywayseecappo First Nation to integrate broadband & other technologies into the local social & economic environment. The original community was selected through an assessment process which identified broadband capacity, knowledge, sufficient community resources and space availability for the youth. The project included working directly with partners such as: Waywayseecappo First Nation and Manitoba E-Association in order to initiate a multi-tiered project that ensured immediate and long term economic development impacts. It was accomplished by integrating broadband & other technologies into the local social & economic environment. It was done without hindering local cultural values.

As a result of the success of the initial A-TEC program in Waywaysecappo First Nation, it was subsequently offered in Sapotaweyak Cree Nation and Pelican Rapids in 2011/2012. In 2012/2013 IEM worked directly with these two communities, Community Futures (CF) Cedar Lake and MB E-Association to implement a long term project to provide even greater community economic value to the cultural and spiritual activities in these communities.

18-3(a) Science, Innovation and Business Development

Expenditures by Sub-Appropriation	Actual 2012/13 $	Estimate 2012/13 FTE	Estimate 2012/13 $	Variance Over (Under)	Expl. No.
Total Salaries & Employee Benefits	1,639	19.00	1,579	60	
Total Other Expenditures	528		613	(85)	
Total Manitoba Research and Innovation Fund	13,127		13,300	(173)	
Total Manitoba Centres of Excellence Fund	720		720	-	
Less: Recoverable from Urban Development Initiatives	(750)		(750)	-	
Total Expenditures	**15,264**	**19.00**	**15,462**	**(198)**	

MANITOBA HEALTH RESEARCH COUNCIL

The Manitoba Health Research Council (MHRC) provides funding for health research initiatives. The Manitoba Health Research Council tables its annual report under separate cover with the Manitoba Legislature.

18-3(b) Manitoba Health Research Council

Expenditures by Sub-Appropriation	Actual 2012/13 $	Estimate 2012/13 $	Variance Over (Under)	Expl. No.
Total Expenditures	**6,003**	**6,003**	-	

INDUSTRIAL TECHNOLOGY CENTRE

The Industrial Technology Centre (ITC) is a special operating agency of the Department of Innovation, Energy and Mines. The Department supports ITC's contribution to economic development activities in Manitoba via an Economic Development Contribution Agreement (a performance contract). ITC provides a wide range of technical services in support of technology based economic development in Manitoba. ITC tables its annual report under separate cover with the Manitoba Legislature.

18-3(c) Industrial Technology Centre

Expenditures by Sub-Appropriation	Actual 2012/13 $	Estimate 2012/13 $	Variance Over (Under)	Expl. No.
Total Expenditures	**900**	**900**	-	

MANITOBA EDUCATION, RESEARCH AND LEARNING INFORMATION NETWORKS

The Manitoba Education, Research and Learning Information Networks (MERLIN), is a special operating agency of the Department of Innovation, Energy and Mines. MERLIN tables its annual report under separate cover with the Manitoba Legislature.

18-3(d) Manitoba Education, Research and Learning Information Networks (MERLIN)

Expenditures by Sub-Appropriation	Actual 2012/13 $	Estimate 2012/13 $	Variance Over (Under)	Expl. No.
Total Expenditures	**396**	**396**	**-**	

BUSINESS TRANSFORMATION AND TECHNOLOGY

OBJECTIVES

Provides strategic leadership to continuously improve the Manitoba Government's Information, Communications, and Technology (ICT) environment through planning and implementing solutions to meet current and future needs.

ACTIVITIES/RESULTS

- Improve service delivery by modernizing government through achieving simplicity, developing partnerships, engaging technology, organizational innovation, streamlining and improving business interactions, and performance reporting;
- Provide leadership for improvement of service quality, citizen-centered service delivery and on-line service initiatives:
- Maximize the potential of SAP;
- Facilitate operational transformation through operational reviews, business analysis, organizational change management, user transition, development of communication plans, training support and end-user role definition and readiness;
- Serve as a link to inter-jurisdictional committees and forums where information and knowledge on service delivery and operational transformation are exchanged;
- Provide support for Committees driving service delivery and operational transformation;
- Develop and continually improve ICT strategic plans, policies, and measurement protocols.
- Work with stakeholders to optimize and align the ICT investment portfolio;
- Research and design new ICT products and services to help build new effective solutions;
- Establish flexible and adaptable information, application and technology foundations;
- Establish and monitor security standards and architecture;
- Provide ICT Goods and Services procurement and contract negotiation services to government programs;
- Ensure an adequate level of ICT Governance is in place to manage ICT resources;
- Provide ICT Risk Management capabilities to ensure adequate mitigation strategies are in place, including appropriate levels of Business Continuity capabilities and Disaster Recovery strategies;
- Proactively participate in strategies to enhance the ICT Sector within Manitoba;
- Exercise comptrollership responsibilities and provide overall financial leadership for ICT;
- Coordinate and manage the use of ICT resources across the ICT program portfolio;
- Proactively manage ICT contracts and license agreements;
- Plan, recruit, allocate, evaluate, train and develop resources for ICT work;
- Manage the process of implementing major changes in ICT to reduce the risks and costs of change, and to optimize its benefits;
- Manage the relationship between ICT and clients to ensure needs are addressed;
- Provide client support in the day-to-day delivery of services;
- Improve the efficiency and effectiveness of project delivery through application of standard project management practices;
- Develop, deploy and support critical ICT infrastructure services;
- Develop and integrate applications to create functional systems responsive to the requirements of clients' program delivery needs;
- Work with the private sector and community based organizations in order to provide high-speed connectivity and broadband capacity to those areas in the province where such services do not currently exist; and
- Maintain and operate existing applications that support the delivery of government program services.

BUSINESS TRANSFORMATION AND TECHNOLOGY reports the following results in 2012/13

- Provided an ongoing government-wide information security awareness program. Continued to work with the Office of the Auditor General to improve practices and policies around systems which support Public Accounts;
- Promoted and utilized the Organizational Change Management Program to assist departments with service transformation activities;
- Released the Business Analysis Toolkit for use by departments and other government agencies to assist in the planning, identification, analysis and articulation of business requirements for transformation projects;
- Supported Service Quality Partners through various activities such as the Manitoba Service Excellence Awards (MSEA), networking and learning opportunities through the Brown Bag Lunch Program and through learning seminars related to service quality;
- Conducted employee and departmental surveys for various stakeholders.
- Completed the migration of the connections from the government's eight-year-old provincial data network linking provincial government offices, schools, health-care facilities and other public sector organizations to the new Manitoba Network. The Manitoba Network will help to serve as a catalyst for the future expansion of broadband and high-speed Internet access services to rural and northern Manitoba communities;
- Implemented Managed Secure File Transfer services providing departments with a secure service to exchange large documents with internal and external clients;
- Introduced new web services to support programs;
- Implemented numerous technology projects with government departments including:
    - SAP Implementation of the Long Service payroll updates;
    - Bike Helmet Online Application – provides services to educate citizens on bike helmet use and allows citizens to avoid first time offences for not wearing bike helmets;
    - Not-for-Profit Online Message Board – provides an online service for promotion of common events;
    - Women's Correction Facility – Security rounds tracking system;
    - An Enterprise Licence Agreement for Geographic Information Systems software for all government;
    - Expanded the use of Online Address Change which allows citizens to update address information to select government programs and utilities;
    - Implemented the Map Gallery system which provides online Mapping services;
- Provided ongoing problem resolution and system enhancement activities for all managed business applications; and
- Continued work on the Application Portfolio Management Initiative to evaluate all applications in government and develop a long range strategy.

18-4(a) Business Transformation and Technology

Expenditures by Sub-Appropriation	Actual 2012/13 $	Estimate 2012/13 FTE	Estimate 2012/13 $	Variance Over (Under)	Expl. No.
Total Salaries & Employee Benefits	19,025	205.72	18,116	909	
Total Other Expenditures	81,111		77,609	3,502	1
Total Expenditures	**100,136**	**205.72**	**95,725**	**4,411**	

1. Additional printer, email, desktop, mainframe costs offset by recoveries

18-4(b) Business Transformation and Technology Recovery

Expenditures by Sub-Appropriation	Actual 2012/13 $	Estimate 2012/13 FTE	Estimate 2012/13 $	Variance Over (Under)	Expl. No.
Total Recoverable from other Appropriations	(61,521)		(55,366)	(6,155)	
Total Expenditures	**(61,521)**		**(55,366)**	**(6,155)**	*1*

1. Additional printer, email, desktop, mainframe costs recoveries offset by expenditures, additional Network recoveries

LEGISLATIVE BUILDING INFORMATION SYSTEMS

OBJECTIVES

To provide a secure technological environment with highly responsive support services and reliable systems that address business requirements of diverse users in the Legislative Building.

The user community encompasses both government and non-government staff. Government staff includes Executive Council, Ministers' and Deputy Ministers' offices, Treasury Division, and departmental staff that work in the building. Non-government staff includes the Legislative Assembly offices of the Speaker and the Clerk, the Leaders of the Opposition, and Caucus offices.

ACTIVITIES/RESULTS

Activities undertaken in 2012/13

- Direct and plan Information Technology initiatives in the Legislative Building;
- Develop and implement strong security strategies to protect electronic information;
- Provide desktop management services including help desk support, requirements analysis, purchasing and asset management;
- Implement and manage all computing services such as e-mail, document storage, printing, remote access, etc.;
- Manage the communications infrastructure for the building network, access to the Internet, and access to the Government-wide network;
- Analyze, develop, implement and support business applications; and
- Provide consulting and project management services on outsource initiatives.

Legislative Building Information Systems reports the following results in 2012/13

- Provided Caucus groups with consulting and technical support. Initiated upgrade to Active Directory, Exchange and Blackberry Enterprise servers, including antivirus upgrade.
- Provided Legislative Assembly with consulting, technical, and project management services in support of various specialty applications. Implemented a replacement system for Hansard transcription services.
- Continued implementation of server virtualization and consolidation.
- Continued the desktop strategy to re-engineer custom applications to thin client and virtualized technology. This includes the latest office automation software as part of an ongoing refresh cycle.
- Continued to investigate video streaming technologies for News Media Services.
- Provided Treasury Division with consulting, technical, and project management services in support of various specialty applications.
- Completed upgrades to the Activity and Issues Management System (AIMS), Anti-Spam software, Anti-Virus software, e-mail Infrastructure and the network infrastructure hardware.
- Completed a project to provide better cell/data coverage within the Legislative Building.

18-4(c) Legislative Building Information Systems

Expenditures by Sub-Appropriation	Actual 2012/13 $	Estimate 2012/13 FTE	Estimate 2012/13 $	Variance Over (Under)	Expl. No.
Total Salaries & Employee Benefits	1,013	12.00	1,010	3	
Total Other Expenditures	266		310	(58)	
Total Expenditures	**1,265**	**12.00**	**1,320**	**(55)**	

MINERAL RESOURCES

MANITOBA GEOLOGICAL SURVEY

OBJECTIVES

The **Manitoba Geological Survey** (MGS) provides authoritative geoscience information to support and facilitate mineral and petroleum exploration in the province, and also conducts a broad range of geoscience activities that address land-use and environmental issues facing Manitobans.

The **Minerals Policy and Business Development** section of MGS is responsible for monitoring industry and commodity information used in formulating Manitoba's minerals policies, promoting mining and exploration investment opportunities, administration of Manitoba's mineral exploration incentive programs and organizing and staging of the annual Mining and Minerals Convention. The section also helps facilitate the provision of community adjustment services to communities facing mine closure. To achieve these goals, the Minerals Policy and Business Development section works closely with the Manitoba Geological Survey and the Mines Branch of Innovation, Energy and Mines, as well as all affected government departments.

ACTIVITIES/RESULTS

GEOSCIENCE PROGRAM

In 2012, the Manitoba Geological Survey (MGS) embarked on a multiyear program to update geological mapping in the northern and central Superior Province, with bedrock mapping at Oxford Lake and Horseshoe Lake, and Quaternary mapping at Knee Lake. A new bedrock mapping program was also started in the western Flin Flon Belt, in an area that had not been mapped since 1951. Lakewater levels finally allowed bedrock mapping at Sipiwesk Lake in the Pikwitonei Domain. Fieldwork continued in the Snow Lake area and the Thompson Nickel Belt (TNB), building on earlier work. New work was undertaken to better define the setting of rare earth elements (in southeastern Manitoba and southwest of Lynn Lake) and nickel (in the Mayville area of southeastern Manitoba).

Phanerozoic investigations focused on understanding the stratigraphy of Manitoba's Cretaceous rocks, evaluation of the potential for shallow unconventional Cretaceous shale gas in southwestern Manitoba, three-dimensional geological modelling of southern Manitoba, collaborative work with the Geological Survey of Canada (GSC) in the Hudson Bay Basin, and finalizing comprehensive research on the petroleum geology and stratigraphy of the Mississippian-Devonian Bakken and Torquay formations.

Academic and industry colleagues presented the results of new or continuing thematic studies in Flin Flon, Snow Lake, The Pas, Hudson Bay Lowland, southwestern and southeastern Manitoba.

MGS' geoscience program is reviewed annually by the Mineral Exploration Liaison Committee (MELC), composed of members of the Mining Association of Manitoba, the Manitoba Prospectors and Developers Association and the Manitoba-Saskatchewan Prospectors and Developers Association, as well as representatives from the universities of Manitoba and Brandon, and the GSC. Petroleum-related program discussions are ongoing with industry contacts throughout the year, and at annual conferences in Calgary.

Collaborative programs with the Geological Survey of Canada

The Geo-mapping for Energy and Minerals (GEM) initiative, announced by the Government of Canada in 2008, is a five-year program designed to provide the geoscience information necessary to guide investment decisions leading to the discovery and development of new energy and mineral resources. The GEM-Minerals initiative in Manitoba is represented by a 2008 GSC-funded airborne radiometric and magnetic survey in the Great Island area; these data were used to support the subsequent geological mapping at Great Island by the MGS in 2009 and 2010. The GEM initiative has also provided support for surficial mapping and geochronology in projects of Manitoba's Far North Geomapping Initiative. Provincial funding for this initiative was for 2008-2011, and no additional bedrock mapping was undertaken in

Manitoba's far north in 2012. A GEM-Energy project is focused on the Phanerozoic stratigraphy of the Hudson Bay and Foxe basins. Through the GEM-Energy program, the GSC provided valuable geochemistry and paleontology laboratory services to help characterize the sedimentary succession and better understand the basin stratigraphy.

The Targeted Geoscience Initiative (TGI) is a federally funded program that is co-planned and jointly delivered with provinces and territories, which provide their own funding for their activities under the program. The TGI-4, announced in the February 2010 federal budget, the fourth such initiative since 2000, focuses on deep exploration. Projects to be conducted under the five-year TGI-4 are in the first year of field study in 2012. MGS collaborates under TGI-4 with mapping and PGE-Ni-Cu-Cr mineralization studies of mafic-ultramafic intrusions in the Bird River Belt, as well as by updating Manitoba's rare metals inventory.

Activities and results for 2012/13 are listed below as they pertain to MGS Program Objectives.

1. Increasing Manitoba's minerals geoscience knowledge base

Superior Province

In 2012, the Manitoba Geological Survey began a multiyear project to remap Oxford Lake, which lies in the largest contiguous greenstone belt in the northwestern Superior Province. The Oxford Lake–Knee Lake belt is central to understanding the stratigraphy, tectonic evolution and economic potential of a large and geologically diverse region that includes some of the most prospective yet underexplored greenstone belts in the Superior craton. Results from the new mapping indicate that the supracrustal rocks in western Oxford Lake are disposed in three fault-bounded structural panels and constitute four tectonostratigraphic assemblages, each of which is characterized by a distinct association of lithofacies and was likely deposited in a unique setting. Results from the 2012 mapping program also improve understanding of the stratigraphic and structural context of known mineral occurrences and can thus be used to formulate new exploration strategies.

Reconnaissance fieldwork in the Horseshoe Lake greenstone belt (east of Lake Winnipeg) was conducted in 2012 to determine the feasibility of a more comprehensive mapping program in subsequent years. This greenstone belt has never been mapped in detail and is one of the few greenstone belts in Manitoba that has not been remapped since 1970. Access and exposure vary considerably; exceptionally low water levels in June 2012 greatly increased shoreline exposures in the Horseshoe Lake area. The belt is dominated by ca. 2735 Ma felsic–intermediate arc volcaniclastic and sedimentary rocks. Limited historical exploration work in the belt returned few encouraging gold numbers.

New geological mapping in the Cat Creek area, in the northern arm of the Bird River greenstone belt of southeastern Manitoba, focused on the Neoarchean Mayville intrusion. The Cat Creek area contains several Archean layered mafic–ultramafic intrusions similar to those that host significant nickel–copper–platinum group element (PGE)–chromium mineralization worldwide. The mapping indicates that the Mayville intrusion can be subdivided into a lower heterolithic breccia zone and an upper anorthosite to leucogabbro zone; it consists dominantly of anorthositic gabbro, gabbroic anorthosite and anorthosite, with subordinate melagabbro and pyroxenite at the base and gabbro at the top. The M2 deposit (nickel-copper-PGE) in the Mayville intrusion has contact-style magmatic sulphide characteristics. In addition to nickel-copper-PGE sulphide mineralization, the Mayville intrusion may host chromite mineralization, as suggested by the presence of massive chromitite bands and disrupted chromitite-pyroxenite layers. Investigation of the magmatic architecture of the Mayville intrusion, together with structural and geophysical analysis, may assist in interpreting the mechanisms of emplacement and identifying potential locations of feeder or magma conduits.

A short field program and follow-up geochemistry were conducted on the Bernic Lake and Rush Lake pegmatite groups, which are part of the Cat Lake–Winnipeg River district in the Bird River greenstone belt. Enrichment in rare metals, such as lithium, tantalum and cesium, suggests that these pegmatites have a potential for rare-metal enrichment in an area that is already famous for its Tanco pegmatite, a prime tantalum-lithium-cesium deposit and one of the largest pegmatites in the world. A systematic re-examination of the pegmatite groups in the Cat Lake–Winnipeg River pegmatite field is an important step in determining the temporal and genetic relationships between the various pegmatite groups, their fractionation histories and their associated rare-metal endowments.

In 2012, the MGS commenced Quaternary fieldwork in the Knee Lake area, located east of Oxford Lake. This project augments an already substantial amount of Quaternary data for this area, collected during the MGS Operation Superior project (1999-2001). This new research focuses on: i) providing a better understanding of the glacial history in the region, ii) continuing till geochemistry and kimberlite indicator mineral sampling surveys, and iii) conducting lithological analyses of clasts within till to assist mineral exploration in this region underlain by prospective bedrock but mantled by deposits of varying thicknesses and different provenances. The resulting data have been compiled to update the surficial geological maps of the area.

Thompson Nickel Belt-Superior Boundary Zone-Pikwitonei Domain

Recent mapping in the Paint Lake, Phillips Lake and Manasan Falls areas has resulted in the recognition of at least one new metasedimentary succession in the Thompson Nickel Belt (TNB). In 2012, work in the Paint Lake area identified a supracrustal sequence occurring along the eastern boundary of the TNB, from Phillips Lake in the south to north of Paint Lake. Preliminary U-Pb ages from what are interpreted to be detrital zircons range from ca. 2850 to 2018 Ma, suggesting that the Paint sequence was deposited in the Paleoproterozoic rather the Neoarchean. Similarities between the Ospwagan Group and rocks of the Paint sequence include the presence of siliceous horizons and meta–iron formation, along with local horizons of metapelite and calcareous rocks. These similarities could allow for the misidentification of Paint sequence rocks for the more economically prospective Ospwagan Group rocks. Alternatively, the Paint sequence could represent a new exploration target in the TNB.

A project was initiated to remap portions of the Archean Pikwitonei Granulite Domain in central Manitoba, with emphasis on interpretation of pre-granulite protoliths. In 2012, mapping at central Sipiwesk Lake revealed relatively uniform, high-grade Neoarchean metamorphism accompanied by intense deformation. The presence of high-grade rocks with supracrustal protoliths on central Sipiwesk Lake suggests that the distribution of Archean greenstone belt–type rocks in the Pikwitonei may be more widespread than previously recognized. Although mineral exploration in high-grade metamorphic terranes is challenging, a number of world-class mineral deposits are hosted in granulite-facies rocks. Studies have also suggested that high-grade metamorphism may be responsible for the localized concentration of metals in these deposits.

Flin Flon-Snow Lake-Lynn Lake

New geological mapping in the Flin Flon Belt includes work begun at Brunne Lake, northeast of Cranberry Portage. The Brunne Lake area is host to a former gold producer, the Gurney mine, and several gold showings. The basaltic rocks in the Brunne Lake area are part of the Flin Flon Belt's ocean-floor assemblage and have geochemical characteristics of both mid-ocean-ridge and back-arc-basin environments. By delineating major shear zones, including the Gurney Mine Shear Zone, and identifying subsidiary shear zones and associated gossans, this study aims to provide new targets for gold exploration. The presence of historical gold showings along the structure suggests that the entire length of the shear zone should be a target for gold exploration.

A continuing program of lithostratigraphic mapping was undertaken within the McLeod Road–Birch Lake thrust panel in the Snow Lake area as part of a Ph.D. study at Laurentian University. The New Britannia mine is a structurally controlled gold deposit hosted in mafic and felsic volcanic and volcaniclastic rocks, spatially associated with the hangingwall of the McLeod Road Thrust. Improved understanding of the volcanic stratigraphy and structural history of the thrust panel hosting the mineralization has identified early structural repetition within the panel and new thrust faults, and has constrained the timing of mineralization. Further understanding of the internal geometry of the thrust panel and identification of major structural breaks will help in developing new guidelines for gold exploration at a property scale.

A reconnaissance geological investigation of the Brezden Lake intrusive complex was conducted to evaluate the potential for rare earth element (REE) mineralization. This heterogeneous intrusive complex, located southwest of Lynn Lake, is hosted by Burntwood Group metasedimentary rocks and peraluminous granitoid rocks of the Kisseynew Domain. Although no carbonatite was found associated with the Brezden Lake intrusive complex, many aspects including mineralogy, textures and geochemistry, are similar to the syenite that hosts the carbonatite at Eden Lake. Some of the heterogeneity and mineralogy of the Brezden Lake syenite could be due to pervasive alkali and carbonate metasomatism.

Geochemical results, particularly the high total of REEs, together with compositional, textural and alteration characteristics similar to Eden Lake syenite, warrant further investigation of the Brezden Lake syenite as a potentially interesting target for REE exploration.

Remapping of the southern extension of the Flin Flon Belt lying under Phanerozoic cover was initiated in 2009 by the Manitoba Geological Survey to produce revised geological maps of an area that is the focus of significant new mineral exploration. A key portion of the remapping effort consists of building a comprehensive database of historical data (drillcore logs, geochemistry, etc.) for the sub-Phanerozoic Flin Flon Belt, using a Microsoft® Access® database. The development of a comprehensive database of all existing geoscientific data in the sub-Phanerozoic Flin Flon Belt will be of great assistance in revising the geological maps of the area, as well as in producing three-dimensional (3-D) models of areas of interest. The newly acquired ability to bring such historical data into a Geographic Information Systems (GIS) environment will also help achieve a better understanding of the regional distribution of geological domains and prospective assemblages, providing valuable guidance for current and future mineral exploration programs.

Far North

Quaternary mapping in the Far North continued in the summer of 2012 in the northeast corner of the province. This work represents a culmination of a 4-year Ph.D. project, and the initiation of a new collaboration with De Beers Canada Exploration Inc. These studies continue to improve our understanding of the palimpsest subglacial landscape, and examine how the various ice-flow indicators, such as till composition, striae and streamlined landforms, are related. This ongoing work continues to revise and detail the glacial history, and to provide important concepts regarding drift exploration in this terrain.

Southwestern Manitoba

Industrial and specialty minerals investigations of the Gammon Ferruginous Member of the Pierre Shale along the Manitoba escarpment has found relatively anomalous concentrations of rare-earth elements (REE) and other metals, such as Pt, Pd, Cu, Ni, V, and Zn. Outcrop mapping and sampling of this strata has been ongoing since 2010 to getter delineate and understand the mineralization.

The Interlake area of Manitoba possesses the required setting for Mississippi Valley-type (MVT) Zn-Pb and kimberlite (possibly diamond-bearing) deposits when compared to other regions. Lake Winnipegosis and South Moose Lake have been the focus of recent attempts by Klyne Exploration, White Cap Exploration and GEM Oil Inc. to discover such deposits. The MGS assisted these companies in their exploration efforts by field visitation and office consultation during 2012/13.

Non-swelling calcium bentonite is present in thin beds separated by thin beds of black shale contained within the lower portion of the Pembina Member of the Pierre Shale. During 2012/13, the MGS correlated the bentonite beds to facilitate future bentonite exploration. Additionally, selected bentonite samples were collected and processed for geochronology study to assist in a regional correlative stratigraphy investigation of Cretaceous-ages beds within the Western Canada Sedimentary Basin and with equivalent beds in the U.S. Midwest. This work will help to facilitate fossil study by the Canadian Fossil Discovery Centre in Morden and to assist in resource appraisal by exploration companies.

2. Increasing Manitoba's hydrocarbon geoscience knowledge base

The Shallow Unconventional Shale Gas Project is a multi-year investigation of the shale gas potential of the Late Cretaceous shale strata of southwestern Manitoba. This sequence of rocks was poorly understood prior to this project. The stratigraphic, geochemical and mineralogical information that has been gathered to date has significantly improved our geoscientific knowledge base. This fundamental information can be used by industry in exploratory programs to assists in identifying units in the Cretaceous shale sequences that have promising characteristics for expanding the potential pay zone thickness at any given location, making exploratory drilling more attractive and less risky. With consistent gas shows, high organic content, and predictable porous units, the Favel and Carlile formations are identified as the best shale gas targets, with some potential in the Gammon Ferruginous Member of the

Pierre Shale. In 2012, outcrop mapping was conducted to find potential gas reservoir units, and samples were collected for multi-element inorganic and organic geochemistry, and mineralogical analysis.

The Hudson Bay and Foxe basins project of the (GEM) program is in its fifth and final year. The aim of this project is to understand the sedimentological framework in this part of the Hudson Bay Basin, to help promote hydrocarbon exploration in this underexplored frontier region. Work in 2012 focused on compiling geochemical and paleontological information, and reconciling the stratigraphy from drillcore in the Hudson Bay Lowland of Manitoba. Results from this project have shown that the Hudson Bay Basin has a widespread distribution of organic source rocks, and has undergone sufficient burial and heating of these source rocks to pass through the oil window, leading to an active hydrocarbon system in this basin. Evidence for oil generation and oil migration has been documented in rocks in Manitoba's Hudson Bay Lowland.

The Mississippian-Devonian Three Forks Group project which studied the stratigraphy and regional geology of the Bakken and Torquay formations in southwestern Manitoba was completed and a final report published. Significant contributions from this project included confirming the presence of the Big Valley Formation in Manitoba (a lucrative oil producing unit in Saskatchewan and North Dakota), proposing a new stratigraphic framework for this group of formations, and providing geoscientific information to assist industry with development and exploration strategies.

The MGS provides technical expertise to energy clients year-round by responding to inquiries made directly to the geologist gained through contacts at meetings and conferences about geoscientific issues, as they pertain to the exploration and development of oil and gas in Manitoba.

The MGS collaborates continuously with neighbouring jurisdictions and organizations with similar goals, such as the National Energy Board, Alberta Geological Survey, Saskatchewan Geological Survey and Ontario Geological Survey, on issues of similar interest, such as stratigraphy and resources investigations.

3. Promoting effective land use and resource management

The MGS participated in the Protected Areas Mining Sector Consultation, reviewing protected areas proposals currently in consideration by government.

The MGS community liaison program is designed to meet the MGS mandate to provide meaningful mineral information to First Nation Communities and to encourage positive working relationships between First Nations, industry, and the MGS. In 2012 a new initiative called 'What on Earth', in partnership with First Nation communities, brought together youth and land-use managers to consider the postsecondary education requirements needed to achieve Earth science–related and mineral-resource sector career opportunities. Community liaison through the MGS encourages a respectful, balanced communicative approach that bridges the perspectives of Manitoba First Nation communities and the mineral-resource sector.

4. Evaluation of environmental impacts and geohazards

The MGS is continuing to progress toward a complete three-dimensional (3-D) geological model of the Phanerozoic succession in southern Manitoba. A series of 2-D cross-sections are one key output from this work. These cross-sections are based on data compiled over a decade, with inputs including Manitoba's water-well, oil-well and stratigraphic-drillhole databases, large lake bathymetry, Lake Winnipeg seismic survey and surface datasets such as the provincial surficial geology compilation map series. A total of 134 cross-sections, each representing a 5 km wide east-west transect across the province between 49°N and 55°N latitudes, have been completed and digitized. The cross-sections will be released digitally as 'vertical maps', are included in the new Map Gallery, and have been imported into the survey's 3-D software to form the basis of Manitoba's 3-D geological model. Manitoba's 3-D geological model and cross-sections unite disparate datasets and put them into a single standardized nomenclature. This work significantly contributes to a variety of geoscience knowledge bases relevant to Phanerozoic stratigraphy, hydrocarbon, groundwater and industrial-mineral resource development, and geological education.

Manitoba has approximately 20 abandoned or orphaned mines, one of which is the Gunnar gold mine, located within the Archean Rice Lake greenstone belt in southeastern Manitoba. This site was chosen by researchers at the University of Manitoba to study how common plant species interact with remnant soil contaminants. The objective is to more confidently select native plant species compatible with the given soil situation, ultimately increasing the likelihood of successful reclamation.

5. Development of products that respond to clients' increasing needs for digital information

The digital mineral deposits and occurrence database for Manitoba has been available on the MGS GIS Map Gallery website since November 2008 and now contains information on 2680 mineral deposits and occurrences. Included in the database is all of the information contained in the reports of the Mineral Deposit Series. Work will continue on entry of new data to incorporate recently released work contained in nonconfidential assessment files, as well as public information available on the SEDAR website. The updates from the past year will be added to the GIS Map Gallery in a November 2012 release. Addition of new occurrences and updating of existing occurrences with files that become nonconfidential are continuing processes.

The Mineral Resources Division completed redesigning the Map Gallery Internet mapping tool. Geoscience Information Services devoted much of 2012 to supporting the conversion of the Map Gallery application on the departmental website to a new, more robust and versatile mapping tool using the latest Internet mapping technology. One of the key features of the new presentation is the inclusion of the main feature layers of the Mines Branch Map Gallery presentation in the 'Geology of Manitoba' map. This combination of geoscience data and mineral and land tenure information allows the user access to more research information in a single map presentation than in the previous Map Gallery. The new Map Gallery, which went live in fall 2012, adds several new or improved functions, including more robust querying of attributes, map annotation, inclusion of orthophotography where available and more versatile data-extraction tools.

Geoscience Information Services continues support for compilation programs, including sub-Phanerozoic Precambrian geology, geology at 1:250 000 and 1:1 000 000 scales, and geophysical data. Geochemical, geochronological and mineral-deposit databases are maintained by this section of the MGS. Geographic-information-system support is a critical component of these projects because of the large volumes of descriptive and analytical data available for the compilations.

The geophysical-dataset compilation project involves a collection of the nonconfidential geophysical datasets that were filed for assessment purposes. This ongoing project focuses on expanding the number of datasets and converting the data presentations to standard format, with particular emphasis on converting data to a standard map projection and datum. The compilation now includes 224 geophysical datasets that can be viewed in the Map Gallery 'Geology of Manitoba' project and are available for free download.

Previously, the MGS had successfully compiled and released seamless queryable digital surficial-material maps, but these compilations do not include point and line features. In 2012, the Manitoba Surficial Digital Data Capture project's goal was to digitize all Quaternary line and point data. This data was then updated through mapping that utilized recently-released remotely-sensed imagery. The development of a comprehensive spatial geoscientific database across Manitoba will be of great assistance to the successful interpretation of ice flow and glacial history in Manitoba, as well as to the agriculture, land-use, aggregate, groundwater, environment, hazard and exploration industries, which require current knowledge to make effective decisions.

6. Collaboration with industry, Federal, university and other provincial agencies

The MGS is engaged in many partnered initiatives, including contributions from the federal government, the mineral industry, provincial surveys, and several Canadian universities. These partnerships provide the MGS access to expertise and technologies that enhance our ability to provide a state-of-the-art geoscience database for Manitoba. These programs facilitate the training of future geoscience professionals, which in 2012–2013 included one Post-Doctoral Fellow, three Ph.D. candidates, and one B.Sc. Honours thesis project.

A number of new partnered projects have been initiated or are in advanced planning stages for 2012–2013. Some, such as a shale gas initiative with Manitoba Hydro and the University of Calgary, branch into new and important fields of research. The shale gas initiative is looking at the geochemistry of the Favel and Carlile formations to understand their gas-bearing and gas-extractive capacity. A new M.Sc. project is looking at the underexplored Devonian Duperow Formation in southwestern Manitoba to characterize its stratigraphy and evaluate its hydrocarbon potential. Two new collaborative research projects between industry, universities and the MGS are ongoing. The first, a Ph.D. study at Laurentian University with financial support of Alexis Minerals Corporation, involves a structural and stratigraphic study in the Snow Lake area. The second, with industry support by Hudson Bay Exploration and Development Company Limited, includes a Ph.D. study on the Lalor deposit and hostrocks.

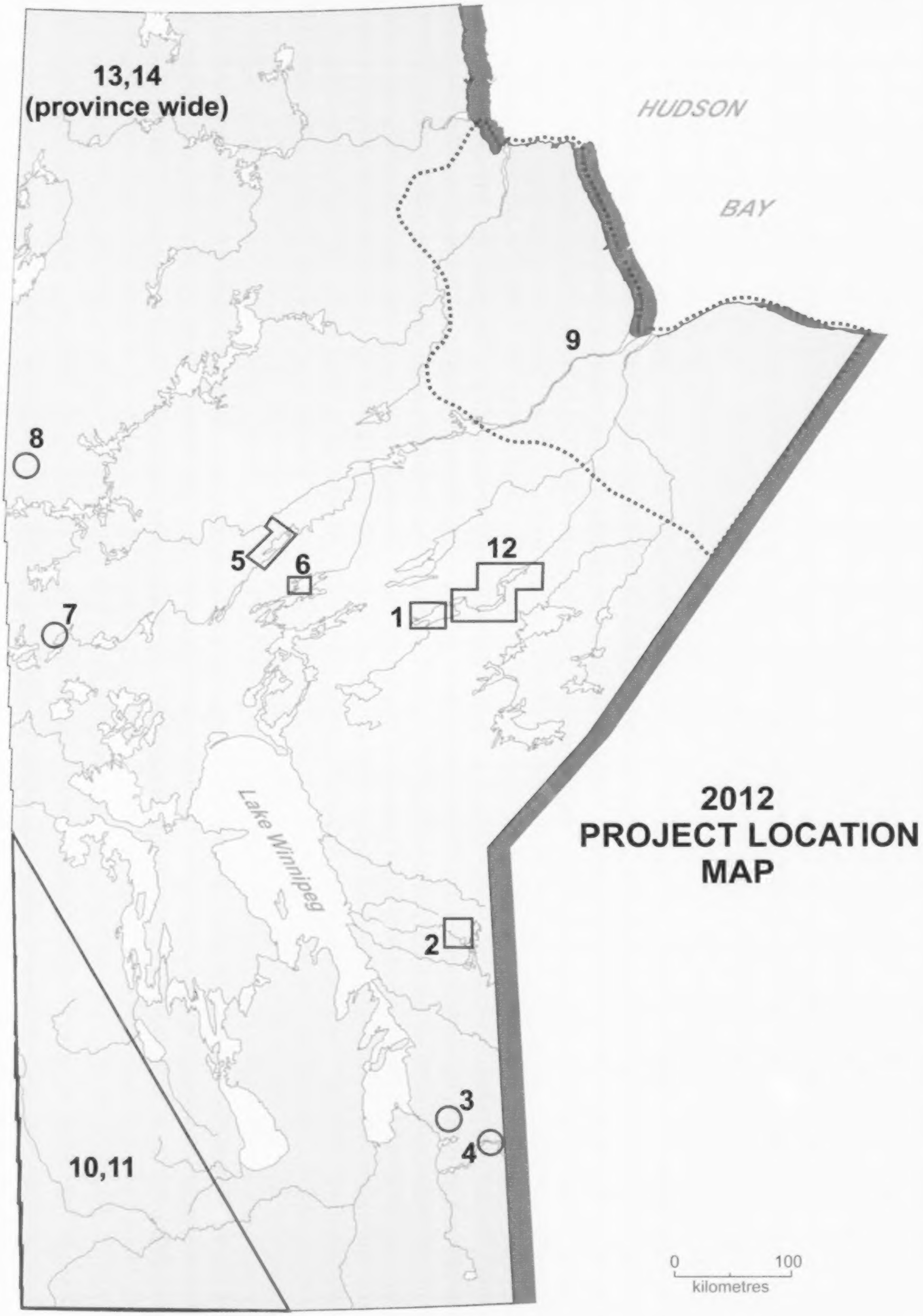
7. Providing minerals industry information through outreach activities

In 2012–2013, the MGS published the annual Report of Activities, two open file reports, three geoscientific report, seven preliminary maps and six data repository items. Most of the publications continue to be offered in hard copy and on CD-ROM or DVD for purchase through Publication Sales, and in electronic format for free download from the Mineral Resources Division website. Technical oral presentations were given at various conferences, which targeted working professionals in academia, industry and business sectors.

The "Geo-Localities and Roadside Geology for Manitoba" project is a new initiative to provide a legacy of unique, digitally-documented, locality-specific Manitoba geological and geomorphological localities (Geo-Localities) on the MGS portion of the Manitoba Government Provincial Data Network for use by MGS staff; and selected information on YouTube™ (Manitoba Virtual GeoTours) and Google Earth™ (Roadside Geology) for use by the general public. During 2012/13, a series of ten videos were placed on YouTube™. Also, a short field trip was made at the end of summer to southwestern Manitoba, to add three new videos to the collection.

The MGS 'Manitoba Rocks!' program is delivered twice annually as part of its mineral-education outreach initiatives. The program offered free activities (e.g., Rock Doc presentations, gold panning, mineral and fossil collecting) for the public and through school tours during Provincial Mining Week at The Forks location in May, and at the Children's Hospital and the annual Manitoba Mining and Minerals Convention in November. A new indoor venue was introduced at The Forks, providing more opportunity for industry to participate with activities and displays; included in 2012 were Vale, HudBay Minerals, Women in Mining (Manitoba Chapter) and the Prospectors and Developers Association of Canada's 'Mining Matters' program. Provincial Mining Week at The Forks drew 3200 visitors in 2012, a new record attendance.

In addition, MGS geologists and Client Services staff contributed to Outreach programming by delivering community-based and school presentations on Manitoba's geology, mineral resources and mining industry. Outreach primarily aimed at increasing Aboriginal participation in exploration and mining in the province. In 2012, the Aboriginal theme was integrated throughout the three-day convention program with sessions that broaden opportunities for proactive engagement between the exploration and mining industry and Aboriginal community leaders. Throughout the year, and on a volunteer basis, MGS staff geologists continued to give in-class presentations to grade 4 students to complement their school curriculum on rocks and minerals.



2012
PROJECT LOCATION
MAP

13,14
(province wide)
HUDSON
BAY
9
8
12
5
6
1
7
Lake Winnipeg
2
3
4
10,11
0
100
kilometres

Map Legend **Location of Projects 2012/2013**

1	Preliminary results of bedrock mapping at Oxford Lake, northwestern Superior Province, Manitoba
2	Geological reconnaissance of the Horseshoe Lake greenstone belt, Superior Province, east-central Manitoba
3	Geological investigations of the Cat Creek area in the Neoarchean Bird River greenstone belt, southeastern Manitoba: new insights into PGE-Ni-Cu-Cr mineralization
4	Rare metals in southeastern Manitoba: pegmatites from Bernic Lake and Rush Lake
5	The Grass River Project: geological mapping at Phillips Lake, and new geochronological results from Paint Lake and Manasan Falls, Thompson Nickel Belt, central Manitoba
6	Preliminary results from geological mapping in the central Sipiwesk Lake area, Pikwitonei Granulite Domain, central Manitoba
7	Geological investigations in the Brunne Lake area of the Flin Flon Belt, west-central Manitoba
8	Rare metals scoping study of the Brezden Lake intrusive complex, western Manitoba
9	Oil shale and reservoir rocks of the Hudson Bay Lowland, northeastern Manitoba
10	Update on the Shallow Unconventional Shale Gas Project, southwestern Manitoba
11	Chemostratigraphy, paleontology and mineral potential of the Gammon Ferruginous Member of the Cretaceous Pierre Shale in southwestern Manitoba
12	Quaternary geology of the Knee Lake area, northeastern Manitoba
13	Quaternary geology of Manitoba: digital compilation of point and line data, with updating of the dataset using remotely sensed (SPOT) imagery
14	Community liaison: geological information sharing, engaging First Nations in Manitoba

18-5(a) Manitoba Geological Survey

Expenditures by Sub-Appropriation	Actual 2012/13 $	Estimate 2012/13 FTE	Estimate 2012/13 $	Variance Over (Under)	Expl. No.
Total Salaries & Employee Benefits	3,957	55.10	3,830	127	
Total Other Expenditures	2,061		1,535	526	*1*
Total Expenditures	**6,018**	**55.10**	**5,365**	**653**	

1. Community Consultations

MINES

OBJECTIVES

The Mines Branch administers legislation governing the disposition of mineral rights (permits, claims and leases), exploration, development, production of the province's non-fuel mineral resources and rehabilitation of mines and quarries. The Branch comprises three sections; Mining Recording, Mining Engineering and Inspection, and Assessment.

ACTIVITIES/RESULTS

Other activities performed by the Mines Branch staff included the continuing compilation of an inventory of the province's aggregate resources and administration of provincial land-use policies that deal with the conservation of mineral resources. The Branch continues it's representation on the sub-committee of IGWG on Mine Environment Neutral Drainage (MEND) Committee, the Green Mining Initiative (GMI), the Federal/Provincial Technical Committee on Mineral Statistics, the Provincial/Territorial Mining Rights Committee and National Orphaned and Abandoned Mines Initiative (NOAMI). Branch staff participated in a number of technical seminars, conferences and mine rescue competition. Staff are also involved in supporting Aboriginal Consultation for issuance of mineral dispositions and work permits.

Under the Orphan and Abandoned Mine Site Program, total expenditures for FY 2012/13 were $45.9 million. In 2012, rehabilitation work was focused on large projects in Sherridon, Lynn Lake, God's Lake and Ruttan. A total of 25 of 31 high hazard sites have been rehabilitated with the remainder will be completed in 2013.

Mining Recording Section

The Mining Recording office is located in Winnipeg with a Claims Inspector in Flin Flon.

The Mining Recording Office maintains up-to-date records of mineral dispositions and leases and all legal transactions that relate to mineral dispositions and leases as required by legislation. Computer terminals are available for the general public to access disposition information on mining claims and permits, quarry leases, quarry surface leases, quarry exploration permits and potash dispositions. The Mines Branch is currently in the process of determining the feasibility of online submissions for all disposition types and map staking.

The Mining Recording Section processes applications for mineral dispositions, leases, monitors and inspects the activities of disposition and lease holders for compliance with requirements of *The Mines and Minerals Act* and Regulations, and collects fees, rentals, royalties, rehabilitation levies, taxes and cash security deposits payable under the Regulations. The total revenue collected by the Section during the fiscal year 2012/13 was $4,719,849 and the rehabilitation levy collected on the removal of aggregate material was $3,033,895 for the same period.

During the calendar year 2012, 493 mining claims, 3 mineral leases and 11 mineral exploration licenses were recorded covering a total of 212,760 hectares. Concurrently, 48 quarry mineral leases, 993 casual quarry permits and 796 registration certificates for private pits and quarries were also issued during the same period. Details of the types of mineral dispositions and leases issued and in good standing in 2012 are shown on the following page.

The Mines Branch has introduced a system called iMaQs (Integrated Mining and Quarrying System) to enable clients to submit applications and manage their dispositions online. iMaQs allows registered users to submit and pay for their transactions online. Registered users are able to access their information and manage activities 24 hours a day via internet access. iMaQs is available to external clients to apply for and manage mining claims, mineral leases, surface leases, mineral exploration licences and private pit registrations. Still under development is the ability for external clients to apply for and manage casual quarry permits, quarry leases, quarry exploration permits, private pit registration, potash exploration permits and potash leases.

Crown - Aboriginal Consultation

The Mineral Resource Division is responsible for Crown-Aboriginal consultation on mineral exploration licences and on work permits which are issued by Manitoba Conservation for mineral exploration and development activities and. The Division is also the lead agency for Crown-Aboriginal consultation on Environment Act licences for mine developments. The Division has established Crown-Aboriginal consultation procedures to guide the consultation processes.

Before a company can carry out exploration activities on a mineral disposition or lease, they have to obtain a work permit issued by the local regional office of Conservation. The majority of work permits are approved for issue by Conservation within 60 days. Once an application for a work permit is received, it is forwarded to the Mines Branch (IEM) who are responsible for carrying out Crown- Aboriginal consultation with Aboriginal communities whose treaty and Aboriginal rights may be adversely affected by the activities.

Work Permit Applications Processed by Mineral Resource Division in 2012/13:

Number of Work Permit Applications Processed	91
Number of First Nations / Aboriginal communities consulted	52
Average number of days between receiving a Work Permit Application and providing Conservation with notice to issue the permit	29
Applications withdrawn by Company/Individual	1

MINERAL DISPOSITIONS ISSUED EACH CALENDAR YEAR 2009 – 2012

	2009		2010		2011		2012	
	No.	Hectares	No.	Hectares	No.	Hectares	No.	Hectares
Mining								
Mining Claims	185	45,103	341	73,574	410	85,952	493	106,668
Mineral Exploration Licences	20	332,589	4	80,685	20	253,237	11	105,435
Mineral Leases	-	-	-	-	-	-	3	1,637
Quarrying								
Leases	88	5,029	146	7,326	95	6,832	48	2,090
Exploration Permits	2	1,230	10	56,884	15	3,480	0	0
Casual Quarry Permits	789	-	852	-	889	-	933	-
Peat*								
Leases	12	2,544	14	1,995	32	5,037	0	0
Exploration Permits	-	-	-	-	-	-	-	-
Coal – Exploration Permits	22	39,380	10	56,884	13	3264	-	-
Private Aggregate Registration Certificates	754	-		772	786		796	-

MINERAL DISPOSITIONS IN GOOD STANDING AT CALENDAR YEAR END 2009 - 2012

	2009		2010		2011		2012	
	No.	Hectares	No.	Hectares	No.	Hectares	No.	Hectares
Mining								
Mining Claims	5,953	976,011	6,142	989,444	5,783	905,218	5,926	932,434
Order-In-Council Leases	3,653	120,562	3,653	120,562	3,653	120,562	3,653	120,562
Mineral Exploration Licenses	97	1,797,707	75	1,395,011	55	797,545	50	791,740
Mineral leases	253	23,416	253	23,416	252	23,532	255	25,169
Potash								
Leases	1	5,787	1	5,787	1	5,787	1	5,787
Exploration Permits	3	127,431	3	127,431	3	127,431	0	0
Quarrying								
Leases	987	54,061	1,131	63,503	1,154	66,130	1,148	68,148
Exploration Permits	9	2,438	33	178,804	32	59,868	0	0
Peat*								
Leases	163	25,842	173	27,663	202	31,977	0	0
Exploration Permits	-	-	-	-	0	0	0	0
Coal – Exploration Permits	26	88,758	19	74,280	30	59,660	0	0
TOTAL	11,145	3,222,013	11,483	74,2802,942,398	11,165	2,197,710	11,033	1,943,840

*A two year moratorium on new peat leases was enacted in June of 2011.

Mining Engineering and Inspection

The primary purpose of the Mining Engineering and Inspection Section is to facilitate and encourage sound exploration, mining and rehabilitation practices in the province consistent with the principles of sustainable development and in compliance with *The Mines and Minerals Act*. It also provides land management and advisory services in support of provincial legislative and regulatory land use and resource management initiatives.

Staff monitor mining activity in Manitoba to ensure compliance with requirements under *The Mines and Minerals Act* including licenses, registrations, permits, leases, closure plan submissions, royalty/levy charges on production, and environmental operation standards. Inspection staff conducted field inspections to ensure mining compliance at quarry lease and casual quarry permit locations, private pit/quarry operations and site rehabilitation projects.

Three new projects were granted "new mine status" and one advanced exploration project was awarded permission to proceed.

Several mine closure plans for operating metal mines, inactive mines and for industrial mineral quarries were reviewed by Mines Branch staff and the closure plans were approved by the Director of Mines.

The Mines and Minerals Act, proclaimed in 1992, introduced a program to address the rehabilitation of pits and aggregate quarries in the province. Aggregate producers pay an annual levy based on the tonnes that they've produced and this money is set aside in a fund to be used for pit and quarry rehabilitation. On the basis of aggregate production from private and Crown lands in fiscal year 2012/13 approximately $2.1 million was contributed to this Quarry Rehabilitation Fund, while 113 rehabilitation projects were completed at a cost of $2.5 million. The total number of projects completed since 1992 comprise approximately 9,053 hectares of land rehabilitated. All the work has been undertaken through private equipment rental agreements or tendered contracts with private operators, administered and monitored by branch inspection staff.

Orphan and Abandoned Mine Site Program

Under the Orphan and Abandoned (O/A) Mine Site Program, total expenditures for FY 2012/13 were $45.9 million. The rehabilitation work focused on large projects in Sherridon, Lynn Lake, God's Lake and Ruttan. To date 25 of 31 high hazard sites have been rehabilitated with the remainder to be completed in 2013. Work continued on high priority sites - Sherridon, Lynn Lake and God's Lake with substantial completion in 2013. Rehabilitation construction commenced at Ruttan Mine Site located near Leaf Rapids.

Significant progress was made under the O/A Mine Site Rehabilitation Program in 2012/13 with the following work carried out:

- Farley Tailings Management Area in Lynn Lake – The rehabilitation work at Farley with Viridian was completed in December 2012. The final phase of this work involves the installation of a "B" Cover over area 10 at the Farley Tailings Management Area.
- God's Lake – A contract was awarded for site cleanup, the primary contractor employed an Aboriginal contractor and 90% of all work was carried out using labour from God's Lake First Nation. The project is 90% complete and remaining work will be completed in 2013. Work on the Elk Island air strip commenced in 2013 with substantial completion expected in October 2013.
- Sherridon Tailings – Rehabilitation work has been ongoing since 2009 with significant progress in 2012. This Project is planned substantial completion in 2013 followed by a 3 year monitoring program.
- Snow Lake – An agreement was signed between Manitoba and BacTech to look at the feasibility of reprocessing of tailings to treat arsenic and recover gold using the company's proprietary bioleaching technology. BachTech have been granted an extension to 2014 to prove the process.
- Elk Island - The remediation work at the Elk Island air strip will be completed by God's Lake First Nation (GLFN) and Arnason Industries Ltd. joint venture. GLFN holds respective interest of 51% in the joint venture.

- Ruttan Mine Site - Engineering work and concepts were completed in 2011. A total of 9 tender packages were developed for the rehabilitation work. The purpose of the smaller work packages was to allow northern contractors and each First Nation the opportunity to bid on the work. Tenure documents required 15-25% First Nation and local involvement in the work. Of the total, 8 contracts have been awarded with the last one in the engineering design phase. Two of the contracts were awarded to Marcel Colomb Environmental (MCDC/Tervita). Substantial completion of the work is scheduled for the fourth quarter of 2014.

Sustainable Land Planning Services

Manitoba has enacted several land use, environmental and resource management acts targeted at managing land and natural resources, creating economic development opportunities and protecting critical habitat and large sustainable ecosystems. The provincial outcome is responsible mining activity that significantly contributes to Manitoban's economic and social prosperity. The mineral resource/land management program facilitates mineral resource and land stewardship in the various federal, provincial and municipal land and resource use management planning and permitting processes. Program objectives are to help facilitate the provincial interest in natural resources, manage surface and Crown mineral land, and facilitate responsible mineral extraction that does not impair ecosystems and damage threatened habitat. Manitoba has a dual system of land tenure and significant effort is placed upon minimizing land access and use conflicts and also provide high quality advisory services to industry, planning authorities, land management stakeholders.

Crown Land Planning

The management, classifying and land use policy development in Agro-Manitoba is the responsibility of the Bloc Panning Committees. Major activities of the Crown land management process include developing and implementing multi-resource land use plans, developing Crown land use codes and supervising land use on Crown lands through an integrated management process. Other significant initiatives include assessing Crown land sales and use proposals, providing technical advice and information on resource management activities. Highlights include developing a model for aggregate extraction and processing within Forestry areas and creating a pre-cleared list of aggregate extraction areas for casual quarry permits. Land management provides planning services related to:

- Crown land sales
- Crown land exchanges
- Crown land planning and development
- allocation of use
- integration of use
- protection, conservation and stewardship of provincial natural resources
- designation of Crown land for provincial parks, ecological resources, wildlife management areas, etc.

All land sales, exchanges, land use codes and other administrative requirements for Crown land planning and management are reviewed and technical advice is provided.

In addition to the above, Manitoba has initiated a new process for provincial Crown land management which includes the Assistant Deputy Ministers and Deputy Ministers land use committees. Land Management also provides technical and policy support to these new land management processes.

A review of the *Crown Lands Act* has been initiated.

Municipal Planning

The Planning Act governs land use planning and development in Manitoba. The legislation provides municipalities and planning districts with the authority to create and adopt a Development Plan and Zoning By-law. Land management is actively involved in providing the legislatively based land planning processes and stakeholders with technical products, advice and technical positions on land planning matters within the context of facilitating the public interest. Support services include reviewing policy and development proposals and ensuring that the province's non-renewable mineral resources are not sterilized by development, preparing mineral resource management technical reports and maps that help facilitate mineral resource management, and providing professional planning advisory assistance to the subdivision review and conditional use processes.

Other significant planning services include policy reviews of plans and zoning by-laws, public consultation and supporting planning appeal Boards. Land Management is responsible for the interpretation and application of Provincial Land Use Policy #8, MR 81/2011. The Provincial Land Use Policy for minerals has been revised to strengthen its intent and provide clarity concerning protecting mineral resources and facilitating responsible development. The regulation has recently been vetted through Interdepartmental Review Committee and was proclaimed in June 2011. Aggregate resources are becoming increasingly scarce in the Capital Region and special emphasis has been placed on designating critical resources for future mining activity, and ensuring that the resources are viable for infrastructure renewal. Lands containing moderate to high quality mineral deposits are designated for mining activity and protective for future extraction. Development pressure from residential development has created a serious land use conflicts due to the transition from rural and agriculture to a semi-urban environment. Permitting for new sources of aggregate has become a serious land use conflict and the challenges to find viable sources in support of the infrastructure deficit.

Sustainable Land Planning Services

	2010	2011	2012
Reviews of new Development Plans and by-law amendments to ensure that mineral resources are not sterilized	135	138	137
Municipal Boundary reviews including annexation or expansion	3	2	2
Review of new zoning by-laws and amendments	142	163	144
Review of closure of roads and public reserves	54	30	45
Review of conditional use applications for the establishment of mining operations	22	15	17
Review of proposed live stock operations	9	4	2
Provide land planning services to 46 planning districts and 144 municipalities			

Land Use Assessment

Land Management provides technical support and advice to many land use resource reviews and assessment processes. Land use proposals are assessed to ensure that the province's mineral resources are not sterilized by development and to ensure that land use conflicts are identified and mitigated. Land use proposals that are assessed are subdivision applications, Crown land sales, zoning and policy memorandum as well as Crown surface encumbrances with the view of documenting land use, tenure and environmental conflicts. This activity directly supports interdepartmental and intergovernmental planning and resource management activities within an integrated management process. A total of 1705 land use proposals were assessed for potential land use conflicts to ensure that the Province's mineral resources were not sterilized by surface development. A new policy and procedure and related process was created and implemented for mineral access rights. In addition, Land Management has partnered with development proponents in large complex surface, mineral and sand and gravel rights ownership to document and interpret various tenures and to help resolve ownership concerns.

Sustainability

The Sustainable Development Act was proclaimed on July 1, 1998. The Act creates a legal framework through which sustainable development will be implemented in the public sector and encouraged in private industry and society. In addition, the principles of sustainable development have been codified in *The Mines and Minerals Act* and provide the legal framework for implementing sustainability on Crown mineral land. An implementation process has been recently initiated and approved by Manitoba, and land management is currently providing technical support to many different provincial working groups and processes. Technical support is provided to COSDI, sustainability reporting, and recently adopted "Green Plan". Other important initiatives include sector based strategies under the provincial land and water initiative. Land Management also provides technical support to the Sustainable Development Innovations

Fund by reviewing technical reports and participating in the approving committee. The principles of sustainable development are being codified into Municipal Plans, Crown Land plans and Zoning By-laws. The sustainability indicators report for mining activity was prepared in the calendar year. Technical support for the Green Mining Initiative was also facilitated. New program development is being developed in response to the Green Plan.

Protected Areas Initiative

Manitoba has initiated a program to protect representative landscapes and ecosystems from logging, mining and hydro development. Mines Branch plays an important technical role in the process by legally withdrawing Crown mining rights from mineral exploration, development and extraction to protect critical habitat from mining activities. It also provides land tenure information and other support to the stakeholder approval process. A new policy and process for protecting Rank 1 Crown mineral rights from exploration and development was implemented. The intent is to provide comprehensive legal security to the protected areas lands and ensure that they are protected until the stakeholder consultation process is completed. Some of the land requests for protected areas status have been re-assigned to the Bloc Planning Committee.

Treaty Land Entitlement

Progress was made towards meeting provincial obligations for Treaty Land Entitlement, Northern Flood Agreement and Grand Rapids Forebay Agreement in accordance with these legal agreement requirements. Land selections containing valid mineral dispositions in good standing were documented and technical support to the selection process was provided. Staff participated in resolving tenure conflicts associated with land selections and also provided procedural and policy advice. Eleven selection sites were ratified covering a total of 11,614 acres.

Public Outreach

Land Management also provide educational and outreach services facilitating sustainability, mineral resource management to various land management boards, municipal councils, industry and the public. Public outreach services include presentations, workshops, and internet access to land management issues, policies, practices to ensure that there is an opportunity for public involvement and discussion regarding resource management issues. Activities include oral and poster presentations at conferences, workshops, public meetings and direct stakeholder consultations concerning mineral resource management. This activity helps facilitate informed decision making by land management boards, industry, and the public. Highlights for 2012 include providing public outreach to Manitoba's cottage lot program, assisting Manitoba prospectors and First Nation groups in land tenure issues, and providing technical support to Watershed Management Boards. This year special emphasis has been placed on conducting workshops on land planning and mineral tenure with stakeholders at the Manitoba Planning Conference. In addition, a new strategic partnership has been created to improve mineral extraction within forestry areas leading to an improved integrated management framework where all values are considered and addressed. Staff also participated in the off-road vehicle process.

Future Direction

Manitoba has embarked in a new direction by creating the “Green Economy”. New initiatives include the “Green Plan”, Endangered Species Act, and the revision of the Sustainable Development Act. Our emphasis will be to reduce the ecological footprint left by mining activity and help protect endangered species and habitat while maintaining a healthy and prosperous mining sector.

Assessment Section

The Section receives and evaluates reports of required work submitted under *The Mines and Minerals Act* to ensure compliance with legislation and acceptable industry standards. At first confidential, these reports are eventually transferred to the non-confidential assessment library open to the public. These reports are indexed, microfilmed and scanned. Clients can view reports in our office or on the website.

Copies can be obtained by printing them directly from the website or ordering them from the Assessment Library. These reports are available on line, on paper, microfilm or compact disc.

The Section also provides advice to the Review Panel and Administrator of the Mineral Exploration Assistance Program on the merits and validity of the projects, acceptance of final reports and recommendations on payment or non-payment of grants.

The Section monitors mining exploration activities in the province and contributes to the preparation of reports on industry activity. It also acts as liaison between Natural Resources Canada and the mining industry for the gathering of statistics on exploration and production.

At the request of the Manitoba Securities Commission, the section reviews technical submissions on mining projects to ensure that they conform with the reporting standards set out in National Instrument 43-101 - Standards of Disclosure for Mineral Projects. One project was reviewed during the past year.

	2009	**2010**	**2011**	**2012**
Reports of work added to assessment library	109	125	126	131
Reports transferred to non-confidential status	106	99	119	117
PRIVATE SECTOR:				
Visits	47	41	15	9
Reports examined	111	50	58	104
Reports duplicated for clients	32	8	36	25
CD'S duplicated for clients	2	1	0	1
DEPARTMENTAL STAFF:				
Reports examined	14	13	2	2
Microfiche created/duplicated for Winnipeg and Northern Offices	46	100	0	0

Note: The decline in office visits and other activities in the private sector is due to the fact that all information is now available on-line.

18-5(b) Mines

Expenditures by Sub-Appropriation	**Actual 2012/13 $**	**Estimate 2012/13 FTE**	**Estimate 2012/13 $**	**Variance Over (Under)**	**Expl. No.**
Total Salaries and Employee Benefits	1,246	26.00	1,312	(66)	
Total Other Expenditures	1,476		731	745	*1*
Total Expenditures	**2,722**	**26.00**	**2,043**	**679**	

1. Refund prior year revenue

PETROLEUM

OBJECTIVE

To provide for and encourage the safe and efficient development of Manitoba's oil and gas resources in accordance with the principles of sustainable development.

ACTIVITIES/RESULTS

Manitoba's oil and gas sector, though small by national or international standards, is a significant component of the provincial economy particularly in the south western part of the province.

In 2012, Manitoba produced 3,005,826.9 cubic metres or 18.9 million barrels of oil having a total value of approximately $1.6 billion breaking all previous investment, drilling, and production records. Since there are no refineries in Manitoba, the majority of the province's production is exported through the Enbridge pipeline system to refiners in Ontario and the US. In 2012 an estimated 715 m^3 (4500 barrels) of oil per day was transported by rail to locations in eastern Canada and the US.

In 2012, the petroleum industry spent $1.48 billion in Manitoba to explore for and develop Manitoba's oil and gas resources, while operating over 4021 wells and transporting crude oil within the province.

The Daly-Sinclair Field located southwest of Virden, continued to be expanded. As of December 31, 2012, the field had over 1794 producing oil wells. In 2012, Daly-Sinclair contributed 41.5 % of the total provincial production.

The Waskada Field experienced continued drilling during 2012. Originally developed in the early 1980's using vertical technology, this field is now being redeveloped and expanded using new horizontal technology and currently accounts for 31.3% of Manitoba's 2012 production.

Since 2008, Manitoba's oil production has risen by 219% to approximately 51,684 barrels of oil per day.

In 2012 PennWest Petroleum received approval and began construction of a gas plant at their existing 11-30-1-25 WPM battery. The gas plant will remove natural gas liquids from the solution gas stream reducing the volume of gas incinerated and flared. The gas plant is designed to process up to 200,000m^3 of gas per day (7mmscf/d) and is planned to produce about 217 cubic meters per day of condensate (1,400 bbl/d) and will be operational during 2013/14. Once fully operational the PennWest plant and the EOG gas plant will result in a combined 30% reduction of gas flaring in the Waskada Field.

It is estimated that the petroleum industry in Manitoba provides direct and indirect employment for approximately 4500 Manitobans.

In 2012/13, royalties, production taxes and revenue from the administration of Crown owned oil and gas rights, fees and sundry added $21.8 million to the Provincial Treasury. Significant revenues were also collected by the province through income taxes, retail sales tax, corporation capital tax, payroll tax and fuel taxes. In addition, the industry paid approximately $11.4 million in property taxes to the various municipalities where oil wells and facilities are located. The industry expenditures of $1.48 billion generated $177 million in direct and indirect tax revenue for the province.

The Petroleum Branch administers The Oil and Gas Act and related regulations governing the exploration, development, production, transportation and storage of crude oil and natural gas. The branch is also responsible for The Oil and Gas Production Tax Act. Additionally, officers and inspectors of the branch are designated as Workplace Safety and Health Officers under The Workplace Safety and Health Act with respect to oilfield operations. The inspectors also act as industry's first point of contact with regard to oil field related environmental issues. .

The branch continued maintenance of its GIS Web-enabled Petroleum Resources map. The map covers southwestern Manitoba including Townships 1-22; Ranges 19-29 W1 and shows provincial Crown oil and gas rights mineral ownership, Crown oil and gas dispositions, wells, oil and gas facilities, field boundaries, topography orthophotos and allows for download of the branch's technical well files. The map is available on the Petroleum website at www.gov.mb.ca/petroleum.

The branch participated in the following consultation and outreach activities during 2012/13:

- The 20th International Williston Basin Petroleum Conference (May 22-24, 2012) in Bismarck, North Dakota. The Mineral Resources Division presented an update of Manitoba oil and gas exploration and development activity at this forum and met with industry clients.
- The Canadian Association of Petroleum Geologists Annual Convention (May 14-16, 2012) in Calgary, Alberta.
- The Canadian Association of Petroleum Land Administration & the Canadian Association of Petroleum Landmen's Information Exchange training session providing information on conducting oil and gas business in Manitoba and industry meetings on January 28 – 30, 2013
- Round table meetings on July 15, 2012 with key companies investing in Manitoba's oil resources.
- Intergovernmental tenure committee meeting and CAPL conference on September 23 -26 in Vancouver.
- Presented at a SPE Conference on November 17, 2012 regarding new developments and regulatory considerations for the handling of multistage hydraulic fracturing.
- Canadian Flare & Venting Regulators Forum Annual meeting June 15-16, 2012 to review current & future regulation needs for flaring and venting.
- Petroleum Service Alliance of Canada March 24 2013, workshop on FracFocus implementations in BC, Alberta, and US states.

The following Informational Notices were issued by the Petroleum Branch in 2012:

- Informational Notice 12-1: Annual Report Abandonment Reserve Fund
- Informational Notice 12-2:Schedule of Public Offering of Manitoba Oil and Gas Rights – April 4, 2012;

Administration and Geology Section

Administration

Administration is responsible for collection of petroleum revenues and administration of Crown owned oil and gas rights. The section collects annual lease rentals, Crown oil royalties and freehold oil taxes, conducts sales of Crown oil and gas leases and exploration reservations and processes lease renewals and extensions. The section is responsible for administering provisions of the Crown Disposition Regulation, the Crown Royalty and Incentives Regulation, the Oil and Gas Lease Agents Regulation and portions of the Drilling and Production Regulation under The Oil and Gas Act. The section also administers The Oil and Gas Production Tax Act and Regulation.

Crown Oil and Gas Rights - Four Crown oil and gas lease sales were held in 2012/2013. One hundred and twenty five Crown Leases covering 12,108 hectares were sold for a total of revenue of $4,056,007.45. Revenue collected from Crown oil and gas lease sales was down from the 2011/2012 revenue by $15,992,190.00

Since 1979, the province has collected over $89.8 million from the disposition of Crown Oil and Gas Rights. As of December 31, 2012, 129755.6 hectares of Crown Oil and Gas Rights were under disposition. Compared to 2011, the total area under disposition has increased by 8.4%.

In 2012, the section processed 102 lease renewals and 21 lease extensions, 57 lease surrenders, 158 transfers of dispositions and 34 oil and gas lease agent renewals and registrations. The section also issued 163 new leases and conducted 18 private sales.

Data Collection - The section collects monthly oil production data and data on the disposal and injection of salt water for all active wells in the province. As of December 31, 2012, there were 5,470 non-abandoned wells in Manitoba. Digital production, logs, technical information and injection histories are available for all wells.

During 2012/13, the section collected $21.8 million from the petroleum industry. This revenue comprised $9.1 million in Crown oil royalties, $7.6 million in freehold oil taxes and $5.1 million from administration of Crown Oil and Gas Rights, fees for well licences, battery operating permits, geophysical licences and oil and gas lease agent registration and publication sales. The revenue collected in 2011/12 was $48.0 million.

Manitoba Drilling Incentive Program, (1992-2013) - The Manitoba Drilling Incentive Program provides licensees of wells drilled after January 1, 1992 and before January 1, 2014, a holiday oil volume of production that is exempt from Crown royalties or freehold production taxes. The holiday volume earned is a function of oil price and location of the new well with respect to other wells.

Holiday oil volumes of up to 20,000 cubic metres can be earned by a new well.

In 2012, 599 wells earned an average holiday oil volume of 9,660 cubic metres, bringing the total number of wells with a holiday oil volume in the program to 4,010 as of December 2012.

Any horizontal well drilled prior to January 1, 2014 receives a holiday oil volume of 10,000 cubic metres. Five hundred and seventy horizontal wells were drilled in 2012.

Effective November 11, 1995, a marginal well where a workover is completed prior to January 1, 2014 earns a 500 cubic metre holiday oil volume. A marginal well is defined as a well that, over the previous 12 months, has been shut-in or has an average production rate of less than 3 cubic metres per operating day. Major workovers include the re-entry of abandoned wells, deepening or recompletion of existing wells from one pool to another and the repair of the casing in a well. No wells earned a holiday oil volume under the program in 2012.

The Manitoba Drilling Incentive Program provides for a portion of the oil produced from a new waterflood or other enhanced oil recovery (EOR) project implemented after April 1, 1999, which is attributed to an increase in reserves, to qualify as third tier oil for royalty/tax purposes. Since April 1, 1999 there have been 16 approved EOR projects where a portion of production has qualified as third tier oil.

Newly drilled injection wells, or wells converted to injection within an approved EOR project, qualify for an "injection well incentive" and a one-year royalty/tax exemption. As of December 31, 2012, a total of 116 wells had qualified for an "injection well incentive" since the inception of the program. A total of 115 wells have completed the injection incentive period.

Performance Deposits and the Abandonment Fund Reserve Account – The section administers trust accounts for performance deposits and the Abandonment Fund Reserve Account. Applicants for licences or permits issued under The Oil and Gas Act are required to submit a performance deposit to ensure operations comply with the Act and regulations. These deposits are held in trust until required rehabilitation work has been completed. In 2012/13, approximately $3.1 million in cash, term deposits and letters of credit were administered.

The Abandonment Fund Reserve Account is established under The Oil and Gas Act. Non-refundable levies on geophysical and well transfer of well licenses, battery operating permits and inactive wells are deposited in the account. The account is used as a source of funds to operate or abandon a well or facility that is in non-compliance with the Act, where the licensee of the well or facility fails to do so. The account can also be used to rehabilitate the site of an abandoned well or facility or to address any adverse effect on property caused by a well or facility. Any expenditure from the account on behalf of a licensee automatically creates a debt of the licensee to the Crown, recoverable in court.

An annual report of activities relating to the account to March 31, 2013 is available on the Petroleum Branch website.

Opening Balance (April 1, 2012)	**1,491,242.63**
Deposits	
Levies and Penalties	331,550.00
Interest	5,898.58
Penalty of Inactive Well Levy	1,462.500
Recovery of Expenditures	0
Total Deposits	**338,911.08**
Expenditures and Refunds	**591,984.33**
Closing Balance (March 31, 2013)	**1,238,169.38**

Geology:

Geology provides geological support to government, public and industry on items requiring geological interpretations and considerations. This includes the assessment of areas for protected status, pipeline, unit and salt water disposal applications, the calculation of Holiday Oil Volume, determining producing zones and managing requests for core sampling and analysis.

Geology prepares reports on Manitoba's petroleum geology and hydrocarbon potential to encourage and assist in the exploration and development of the provinces oil and gas resources. A system for the designation of field and pool boundaries is maintained and updated annually. As of January 1, 2013, Manitoba had 13 designated oil fields and 185 designated active oil pools.

Accomplishments in 20012/2013 include:

- Initiated the restructuring of the geological sections procedures to enable digital submissions, allowing reduced environmental impact and faster turnaround times.

Engineering and Inspection Section

Engineering:

Under the authority of the Drilling and Production Regulation and the Geophysical Regulation, Engineering processes drilling licenses, geophysical licenses and applications to re-complete, suspend, or abandon wells. It also issues permits for all oil and gas facilities. In 2012/13, a total of 684 drilling licenses and 16 geophysical licenses were issued. In addition, 66 technical well operations applications were processed.

The Petroleum Branch processed and approved 3 waterflood enhanced oil recovery projects in 2012/13. Tundra Oil & Gas created Ewart Unit No.1, Red River Oil created Sinclair Unit No. 9 and CNRL created South Pierson Unit No. 2.

The Petroleum Branch processed and approved a Gas Plant for PennWest Exploration. The Petroleum Branch also approved the continuation of the CO_2 Enhanced Oil Recovery project in the Sinclair Field for Tundra Oil & Gas Partnership.

The Petroleum Branch also processed and approved 7 new pipeline applications totalling approximately 177 km of new pipeline infrastructure in Manitoba.

Information and advice are provided to the petroleum industry and the public at the Winnipeg, Virden and Waskada offices.

Inspection:

Inspection enforces regulations under The Oil and Gas Act related to geophysical, drilling, production, and pipeline operations. Specifically, the inspectors license and inspect field facilities, investigate complaints, witness specific operations, and interpret and communicate departmental or regulatory requirements to industry personnel. Inspectors are also responsible for carrying out safety and health inspections of petroleum industry operations under The Workplace Safety and Health Act. District offices are located in Virden and Waskada.

Through the 2012/13 year the Petroleum Inspection team inspected 110 oil and gas facilities. All batteries in the province were inspected at least once during the year. Inspection also inspected 37 service rigs and 17 different drilling rigs. A total of 93 non-compliance orders were issued in 2012/13 for wells and oil and gas facilities not in compliance with the Act. A total of 1,115 flow line applications were processed and 246 excavation permits issued.

Inspectors visited 204 abandoned well and battery sites to ensure that the approved abandonment procedures have been followed. During 2012/13 109 Certificates of Abandonment were issued, allowing for the release of wells from performance deposit requirements. The unit also manages a program of environmental protection involving the rehabilitation of all oil or salt water spill sites. During 2012/13, 96 new spills were inspected and 37 spill sites were fully rehabilitated and released from the branch's rehabilitation program.

More information on spills is presented in the Petroleum Industry 2012 Spill Statistics and Report available from the branch or on the Petroleum Branch's website.

Digital Information Services Section

Digital Information Services is responsible for development and maintenance of computer systems within the branch. These systems include a diverse collection of activities such as web services, database maintenance, GIS, distribution of data to brokers, application development, document images and mapping services.

Digital Information Services has acted as the lead on conducting an opportunity assessment with the Petroleum Registry of Alberta. The Registry allows producers to digitally submit all information related to the tracking of volumetric oil and gas production data. The Registry has been used in Alberta for over 10 years. On April 1, 2012 Saskatchewan went live on the Registry. The petroleum industry sponsored and partially funded the Opportunity Assessment for Manitoba as it is believed there would be operational benefits to have 3 provinces utilizing the same software system. Digital Information Services has met with BTT and IPC clearing the way for any data issues. Continued funding is required to continue to the next stage in the Registry process.

In 2012/13, the section continued to expand the offering of information available on the internet. The section provided ongoing support and development for GIS map products, Petroleum website enhancements and the Manitoba Oil and Gas Well Information System (MOGWIS).

Accomplishments in 2011/12 include:

- Started development of the Petroleum Well Listing which will enable industry to submit data to the branch
- Development of digital document management structure.
- Continued research into data standardization with other jurisdictions through the investigation of the use of the Alberta Registry;
- Continued support for the Petroleum Branch Manitoba Oil and Gas Well Information System
- Continued updating of Petroleum datasets for outside use
- Continuing instruction of the Petroleum GIS, which is approved by Manitoba education for Grade 10 Social studies
- New Map gallery initiated on website

Minister's and Director's Approvals

Under The Oil and Gas Act, the Minister and the Director of Petroleum have authority to issue orders relating to drilling, production, storage and transportation of oil and gas. The Minister has authority to make orders relating to well spacing, enhanced recovery, maximum production rates, seizure of wells and facilities and to enter into Unit Agreements on behalf of the Crown. The Lieutenant Governor in Council has delegated parts of this authority, under Order in Council 384/2001, to the Director where the circumstances are considered routine. The Director has authority to issue orders relating to salt water disposal, designation of field and pools, designation of new oil status and to affect the seizure of wells and facilities of a non-compliant operator pursuant to a Ministerial Seizure Order.

In 2012/13 the Minister made the following orders:

Missing Royalty Owner SW ¼ 10-14-29 W1	Aug. 2, 2012	Crescent Point Energy Corporati
Missing Royalty Owner SW ¼ 20-1-27 W	Aug. 15, 2012	Legacy Oil + Gas Inc.
Missing Royalty Owner NW ¼ 27-7-28 W1	Sept. 17, 2012	Tundra Oil & Gas Partnership
Missing Royalty Owner NE ¼ 31-16-27 W1	Oct. 31, 2012	Tundra Oil & Gas Partnership
Missing Royalty Owner All 13-13-29 W1	Dec. 10, 2012	Tundra Oil & Gas Partnership
Missing Royalty Owner NE ¼ 5-12-28 W1	Dec. 21, 2012	Crescent Point Energy Corporati
Missing Royalty Owner NE ¼ 10-9-29 W1	Feb. 13, 2013	Tundra Oil & Gas Partnership
Missing Royalty Owner SE ¼ 3-10-29 W1	Feb. 14, 2013	Tundra Oil & Gas Partnership.
Missing Royalty Owner SW ¼ 36-1-28 W1	Feb. 15, 2013	Legacy Oil + Gas Inc.
Missing Royalty Owner SE ¼ 24-9-29 W1	Feb. 28, 2013	1662960 Alberta Ltd.
Missing Royalty Owner S 1/2 19-9-28 W1	Mar. 7, 2013	Tundra Oil & Gas Partnership
Missing Royalty Owner SE ¼ 28-1-28 W1	Mar. 13, 2013	Legacy Oil + Gas Inc.
Missing Royalty Owner NE ¼ 17-8-28 W1	Mar. 13, 2013	Tundra Oil & Gas Partnership
Pipeline Construction Permit No. 2012-05	April 5, 2012	EOG Resources
Pipeline Operating Permit No. 2012-06	April 27, 2012	Enbridge Pipelines (Virden) Ltd
CO2 Enhanced Oil Recovery Order No. 2	May 31, 2012	Tundra Oil & Gas Partnership
Pipeline Operating Permit No. 2012-03A	June 20, 2012	Pembina NGL Corporation
Pipeline Construction Permit No. 2012-07	June 27, 2012	EOG Resources
Pipeline Construction Permit No. 2012-08	July 8, 2012	Enbridge Pipelines (Virden) Ltd
Pipeline Operating Permit No. 2012-09	July 10, 2012	Tundra Oil & Gas Partnership
Pipeline Operating Permit No. 2012-09A	August 10, 2012	Tundra Oil & Gas Partnership
Pipeline Operating Permit No. 2012-10	August 10, 2012	Enbridge Pipelines (Virden) Ltd
Gas Plant Permit No. 2012-11	September 21, 20	PennWest Exploration
Unit Agreement (Ewart Unit No. 1)	November 1, 201	Tundra Oil & Gas Partnership
Pipeline Operating Permit No. 2012-12	November 15, 20	EOG Resources
Pooling Order 2012-01	November 19, 20	Tundra Oil & Gas Partnership
Unit Agreement (South Pierson Unit No.3)	January 1, 2013	CNRL
Pipeline Construction Permit No. 2013-01	January 21, 2013	Tundra Energy Marketing Limite
Unit Agreement (Sinclair Unit No. 9)	March 1, 2013	Red River Oil
Pipeline Construction Permit No. 2013-03	March 13, 2013	Legacy Oil + Gas Ltd

Pipeline Construction Permit No. 2013-02	March 21, 2013	PennWest Exploration

In 2012/13, the Director of Petroleum made the following orders:

Water Flood Order 23	March 1, 2013	Tundra Oil & Gas Partnership
Salt Water Disposal No. 235	Apr. 4, 2012	Tundra Oil & Gas Partnership
Salt Water Disposal No. 236	Apr. 5, 2012	Relative Resources Ltd.
Salt Water Disposal No. 237	Apr. 10, 2012	Antler River Resources
Salt Water Disposal No. 238	Jul. 4, 2012	EOG Resources Canada Inc.
Salt Water Disposal No. 239	Jul. 17, 2012	EOG Resources Canada Inc.
Salt Water Disposal No. 240	Sep. 5, 2012	Tundra Oil & Gas Partnership
Salt Water Disposal No. 241	Sep. 21, 2012	Fort Calgary Resources Ltd.
Salt Water Disposal No. 242	Oct. 16, 2012	EOG Resources Canada Inc.
Salt Water Disposal No. 243	Oct. 16, 2012	EOG Resources Canada Inc.
Salt Water Disposal No. 244	Dec. 7, 2012	Tundra Oil & Gas Partnership

Petroleum Industry Overview:

	2011	**2012**
New wells drilled	578	616
Oil Production	2,359,246 m^3 (14.8 million bbls)	3,005,826.9 m^3 (18.9 million bbls)
Value of oil sales ($million)	$1,360	$1,599
Average selling price	$577.46 m^3($91.76/bbl)	$531.95 m^3($84.53bbl)
Wells producing - December	3,393	3,741
Estimated Industry Expenditures ($million)	$1,228	$1,482

More comprehensive information and historical statistics on Manitoba's petroleum industry are presented in the Oil Activity Review available from the Petroleum Branch.

18-5(c) Petroleum

Expenditures by Sub-Appropriation	**Actual 2012/13 $**	**Estimate 2012/13 FTE**	**$**	**Variance Over (Under)**	**Expl. No.**
Total Salaries & Employee Benefits	1,531	22.50	1,563	(32)	
Total Other Expenditures	452		383	69	
Total Expenditures	**1,983**	**22.50**	**1,774**	**37**	

BOARDS AND COMMISSIONS

OBJECTIVES

To provide for the resolution of disputes between surface rights holders, mineral rights, and oil and gas rights holders with respect to accessing minerals, oil and gas.

Mining Board

The Mining Board is established under the Mines and Minerals Act. The primary function of the Board is the arbitration of disputes between surface rights holders and mineral rights holders with respect to accessing of minerals other than oil and gas. The Board can also hear and resolve disputes between holders of mineral dispositions and between holders and officers of the Department.

In 2012 the Mining Board received one request for immediate access. The Mining Board will address the issue of compensation in 2013.

Surface Rights Board

The Surface Rights Act establishes a quasi-judicial process for resolving land access and development disputes between oil and gas development proponents and surface rights holders. The Act also establishes a Board to arbitrate and mediate disputes and establishes appropriate compensation for petroleum development activities. Land Management provides administrative support to the process and the Board.

Due to its quasi-judicial nature, the Board operates independently and is attached to the Department for administrative reasons only.

Highlights for 2012 include reviewing 37 parcels of land for annual compensation, one right-of-entry application, one surface lease and compensation application and one application of an expansion of existing valve site. Other significant activities for the fiscal year include improving the administrative process and procedures for the Board activities, including public consultation and written comments from stakeholders.

	2009	2010	2011	2012
Signed Agreements for Surface Leases (fiscal year)	332	415	470	344
Total Number of Recorded Surface Leases	4,147	4,562	5,032	5,376
Review of Right of Way Applications	0	28	3	3
Review of Compensation Applications	0	0	3	5
Termination of Board Orders	0	0	0	0
Application for Abandonment Orders	0	0	0	0
Board Orders Issued	0	0	3	4
Mediation Reports	0	0	0	0

18-5(d) Boards and Commissions

Expenditures by Sub-Appropriation	Actual 2012/13 $	Estimate 2012/13 FTE	Estimate 2012/13 $	Variance Over (Under)	Expl. No.
Total Salaries and Employee Benefits	16		30	(14)	
Total Other Expenditures	11		16	(5)	
Total Expenditures	**27**		**46**	**(19)**	

MINERAL INDUSTRY SUPPORT PROGRAMS

The Mineral Industry Support Programs are delivered under Manitoba Geological Survey.

Mineral Exploration Assistance Program

The Mineral Exploration Assistance Program (MEAP) provides financial assistance to eligible companies or individuals who undertake mineral exploration in Manitoba. Established in the fall of 1995, MEAP was renewed for an additional three years starting with the April 2011 offering and will expire in 2013/2014. The program provides a single offering each year with $1.5 million of assistance annually. The program was designed to increase exploration and stimulate activities that may lead to the development of new mines. Companies/individuals may qualify for 25% - 35% of eligible exploration expenditures up to a maximum of $200,000.00 per recipient, per fiscal year; depending on the area of exploration. A higher percentage of assistance is offered for projects undertaken in the Northern Superior region of the province, due to remoteness and limited infrastructure. MEAP has extended the higher percentage of assistance on eligible expenditures to include the Lynn Lake/Leaf Rapids areas.

Companies with approved projects under the April 2012 offering had until March 31, 2013 to complete their work. Seventeen of the original 27 approved projects were completed.

Reviews, Audits and Inspections

To ensure accountability and integrity of the Program, the Department continued to conduct audits and site inspections following guidelines developed with the Provincial Internal Audit office. In the 2012/2013 fiscal year, Innovation, Energy & Mines and the Provincial Internal Audit Office decided to forego internal audits of the program for the year due to other priorities within Internal Audit and past history of administration of the program. Site inspections are conducted on a random or as needed basis.

Program Highlights from October 1995 to March 31, 2013

- 185 companies have participated under MEAP of which:
  - 143 companies are considered new to Manitoba.
  - 16 are major exploration companies, and
  - 169 are junior companies (note: a company is considered a major exploration company if its market capitalization is greater than $100 million).
- $29.8 million of assistance has been issued to 772 completed projects.
- $262.1 million in exploration expenses have been reported.
- Reported exploration expenditures under the Program indicate every $1 million in assistance paid generates $8.8million in exploration expenditures.
- For every dollar of MEAP assistance, the Manitoba Bureau of Statistics estimates that there is $1.85 in taxes collected in Manitoba.

Mineral Exploration Assistance Program 2012Status

Offering	*Applications Received*	Approved Applications	Proposed Exploration $ in 000's	Assistance $ Allocated in 000's	Projects Completed	Actual Exploration $ in 000's	Assistance $ Paid
12-04-01	27	27	20,211.3	1,500.0	17	10,822.9	904.6
TOTAL	**27**	**27**	**20,211.3**	**1,500.0**	**17**	**10,822.9**	**904.6**

Note: Projects approved under the April, 2012 offering have until June 14, 2013 to file final reports and make application for final payment

Results of Assistance by General Region of Exploration for 2012/2013

	Projects		Exploration $ in 000's		Assistance $ in 000's	
Far North	2	(7.4%)	$ 0	(0.0%)	$0	(0.0%)
Flin Flon/Snow Lake	8	(29.6%)	$4,248.6	(39.3%)	$344.9	(38.1%)
Hudson Bay Lowland	0	(0.0%)	$0.0	(0.0%)	$0.0	(0.0%)
Lynn Lake/Leaf Rapids	2	(7.4%)	$526.6	(4.9%)	$83.2	(9.2%)
Northern Superior	2	(7.4%)	$ 22.8	(0.2%)	$5.0	(0.6%)
SE Trans-Hudson Orogen	0	(0.0%)	$ 0.0	(0.0%)	$0.0	(0.0%)
Southeastern Manitoba	7	(25.9%)	$5,202.3	(48.1%)	$307.7	(34.0%)
South Central Manitoba	0	(0.0%)	$0.0	(0.0%)	$0.0	(0.0%)
Thompson Nickel Belt - Superior Boundary Zone	6	(22.2%)	$822.7	(7.6%)	$163.8	(18.1%)

Manitoba Prospectors Assistance Program

The Manitoba Prospectors Assistance Program (MPAP) offers grants to prospectors conducting exploration on either their own Manitoba properties or open Crown land. The Program is targeted at increasing mineral exploration in Manitoba to help replenish declining ore reserves. The Program is funded at $23,000 per year and allows individual prospectors to qualify for up to 50% of their prospecting expenditures incurred up to a maximum of $7,500 per prospector per year. The program also provides 80% of the cost of one return charter flight or $1,500.00 per year, whichever is less, for projects undertaken in more remote areas of the Province. The maximum assistance of $9,000.00 is available per applicant, per year.

In 2012/13 the program received 5 applications for grants; 5 prospecting projects were approved under the program and 2 were completed. The total amount of Program funds dispersed for 2012/2013 was $5,329.15.

Bill Hood	2,546.00
Ken Klyne	2,783.15
Total Funds Dispersed:	$5,329.15

Manitoba Potash Project

The Manitoba Potash Corporation (MPC) holds the development rights to known potash reserves in the Russell-Binscarth area of southwest Manitoba. MPC was created in 1986 as a joint venture between the province of Manitoba (49 per cent) and Canamax Resources Inc. (51 per cent). In 1990, Canamax sold its 51% interest in the potash project, to Potamine Potash Mining of Canada Inc. (Potamine), a subsidiary of Enterprise Miniere et Chimique (EMC) Group of France, In November 2006 BHP Billiton, one of the largest diversified mining companies in the world, purchased Potamine's share in the MPC.

BHP Billiton has completed an internal scoping study on mine development of their Russell property in 2010. Their assessment indicates that a nominal 2 million tonne per year mine is technically feasible, but it faces significant technical and economic challenges. BHP Billiton is committed to ongoing evaluation of market conditions and opportunities as they arise that could improve the project economics. BHP continues to maintain the project and cover all carrying costs. Until the investment can demonstrate a positive return, there are no plans to progress the development of the project

18-5(e) Mineral Industry Support Programs

Expenditures by Sub-Appropriation	Actual 2012/13 $	Estimate 2012/13 FTE	Estimate 2012/13 $	Variance Over (Under)	Expl. No.
Mineral Industry Support Programs					
- Mineral Exploration Assistance Program	-		1,500	(1,500)	*1*
- Prospectors Assistance Program	5		23	(18)	*1*
- Manitoba Potash Project	86		197	(111)	
Total Expenditures	**91**		**1,720**	**(1,629)**	

1. Elimination of Par A budget for Mineral Exploration Assistance Program and Prospectors Assistance Program. These programs will be paid directly from Mining Community Reserve Fund (MCR).

COSTS RELATED TO CAPITAL ASSETS

Commencing in 1999/2000, it is the policy of the Province of Manitoba to record in the accounts of the Province, the tangible capital assets owned and used by the Province along with appropriate amortization costs. The Provincial Comptroller has established standard asset classes, along with capitalization thresholds and corresponding amortization rates.

Consistent with this policy, the department records amortization of:

- the Enterprise System allocated to departments based on projected use;
- the amortization of other departmental and government assets; and
- the interest related to the assets.

18-6 Amortization and Other Costs Related to Capital Assets

Expenditures by Sub-Appropriation	Actual 2012/13 $	Estimate 2012/13		Variance Over (Under)	Expl. No.
		FTE	$		
(a) ENTERPRISE SYSTEM					
Amortization Expense	3,458		3,448	10	
Less: Recoverable from other appropriations	(3,458)		(3,448)	(10)	
(b) Amortization Expense	6,861		5,933	(928)	
(c) Interest Expense	2,784		2,276	(508)	
Total Expenditures	**9,645**		**8,209**	**(1,436)**	*1*

1. The variance is due to less finished capital projects.

INNOVATION, ENERGY AND MINES

Reconciliation Statement

EXPENDITURE DETAILS	
2012/13 MAIN ESTIMATES	87,906
MAIN ESTIMATES AUTHORITY TRANSFERRED FROM: • **Enabling Appropriations** - Internal Services Adjustment	 -
2012/13 ESTIMATE	87,906

Innovation, Energy and Mines
Expenditure Summary
For Fiscal Year Ended March 31, 2013 (with comparative figures for the previous year)

Estimate 2012/13 $			Appropriation	Actual 2012/13 $	Actual 2011/12 $	Increase (Decrease) $	Explanation Number
	18-1		**Administration and Finance**				
37		(a)	Minister's Salary	37	33	4	
		(b)	Executive Support				
492			(1) Salaries and Employee Benefits	485	476	9	
73			(2) Other Expenditures	69	68	1	
150		(c)	Administration and Finance	150	148	2	
752			Total 18-1	741	725	16	
	18-2		**Energy Division**				
		(a)	Energy Division				
1,005			(1) Salaries and Employee Benefits	1,141	854	287	
944			(2) Other Expenditures	721	2,172	(1,451)	*1*
1,949			Total 18-2	1,862	3,026	(1,164)	
	18-3		**Science, Innovation and Business Development**				
		(a)	Science, Innovation and Business Development				
1,579			(1) Salaries and Employee Benefits	1,639	1,556	83	
613			(2) Other Expenditures	528	610	(82)	
13,300			(3) Manitoba Research and Innovation Fund	13,127	13,400	(273)	
720			(4) Manitoba Centres of Excellence Fund	720	720	0	
(750)			(5) Less: Recoverable from Urban Development Initiatives	(750)	(750)	0	
6,003		(b)	Manitoba Health Research Council	6,003	6,003	0	
900		(c)	Industrial Technology Centre	900	900	0	
396		(d)	Manitoba Education, Research and Learning Information Networks	396	396	0	
22,761			Total 18-3	22,563	22,835	(272)	

Expenditure Summary

Estimate 2012/13 $			Appropriation	Actual 2012/13 $	Actual 2011/12 $	Increase (Decrease) $	Explanation Number
	18-4		**Business Transformation and Technology**				
		(a)	Business Transformation and Technology				
18,116			(1) Salaries and Employee Benefits	19,025	18,849	909	
77,609			(2) Other Expenditures	81,111	83,681	3,502	2
(55,366)		(b)	ICT Services Manitoba Recovery	(61,521)	(57,866)	(6,155)	3
		(c)	Legislative Building Information Systems				
1,010			(1) Salaries and Employee Benefits	1,013	1,019	3	
310			(2) Other Expenditures	252	266	(58)	
41,679			Total 18-4	39,880	45,949	(1,799)	
	18-5		**Mineral Resources**				
		(a)	Manitoba Geological Survey				
3,830			(1) Salaries and Employee Benefits	3,957	3,763	194	
1,535			(2) Other Expenditures	2,061	2,997	(936)	4
		(b)	Mines				
1,312			(1) Salaries and Employee Benefits	1,246	1,273	(27)	
731			(2) Other Expenditures	1,476	22,996	(21,520)	5
		(c)	Petroleum				
1,563			(1) Salaries and Employee Benefits	1,531	1,436	95	
383			(2) Other Expenditures	452	411	41	
		(d)	Boards and Commissions				
30			(1) Salaries and Employee Benefits	16	23	(7)	
16			(2) Other Expenditures	11	11	-	
		(e)	Mineral Industry Support Programs				
1,500			(1) Mineral Exploration Assistance Program	-	1,474	(1,474)	6
23			(2) Prospectors' Assistance Program	5	13	(8)	
197			(3) Manitoba Potash Project	86	86	-	
11,120			Total 18-5	10,841	34,483	(23,642)	

Expenditure Summary

Estimate 2012/13 $			Appropriation	Actual 2012/13 $	Actual 2011/12 $	Increase (Decrease) $	Explanation Number
	18-6		**Amortization and Other Costs Related to Capital Assets**				
		(a)	Enterprise System				
3,448			(1) Amortization	3,458	3,458	-	
(3,448)			(2) Less: Recoverable from other appropriations	(3,458)	(3,458)	-	
6,861		(b)	Amortization Expense	5,933	6,148	(215)	
2,784		(c)	Interest Expense	2,276	2,329	(53)	
9,645			Total 18-6	8,209	8,477	(268)	
87,906			**TOTAL INNOVATION, ENERGY AND MINES**	84,096	115,495	(31,399)	

1. *Decreased Budgeting for Outcomes expenditures.*
2. *Increased printer, email, desktop, mainframe costs*
3. *Increased printer, email, mainframe, desktop recoveries*
4. *Decreased Aboriginal Consultations expenditures.*
5. *Environmental Liabilities provision was set up in 2011/12.*
6. *Mineral Exploration Assistance program will be paid directly from Mining Community Reserve Fund (MCR)*

Innovation, Energy and Mines
Revenue Summary by Source
For Fiscal Year Ended March 31, 2013 (with comparative figures for the previous year)

Actual 2011/12 $	Actual 2012/13 $	Increase (Decrease) $	Source	Actual 2012/13 $	Estimate 2012/13 $	Variance $	Explanation Number
			Current Operating Programs:				
			Taxation				
10,018	7,823	(2,195)	Oil and Natural Gas Tax	7,823	11,433	(3,610)	*1*
10,018	7,823	(2,195)	Sub-Total	7,823	11,433	(3,610)	
			Other Revenue				
35,740	14,630	(21,110)	Petroleum Royalties and Fees	14,630	24,569	(9,939)	2
5,358	4,720	(638)	Minerals Royalties and Fees	4,720	4,251	469	
980	1,148	167	Sundry	1,148	1,008	139	
42,078	20,497	(21,581)	Sub-Total	20,497	29,828	(9,931)	
52,096	**28,320**	**(23,776)**	**Total**	**28,320**	**41,261**	**(12,941)**	

Explanations:

Comparison to Previous Year

1. *Lower price and tax rate*
2. *Decreased land sales*

Comparison Actual to Estimate

1. *Lower price and tax rate*
2. *Less land sales than estimated.*

FIVE YEAR HISTORY

Innovation, Energy and Mines

Five-Year Expenditure and Staffing Summary by Appropriation ($000s)

For Five Years Ended March 31, 2013

	Actual/*Adjusted Expenditures									
	2008-2009		2009-2010		2010-2011		2011-2012		2012-2013	
	FTE	$	FTE	$	FTE	$	FTE	$	FTE	$
Administration and Finance	7.00	718	7.00	745	7.00	723	7.00	725	7.00	741
Energy Division	11.00	3,396	10.00	2,622	10.00	3,712	11.00	3,026	11.00	1,862
Science, Innovation and Business Development	19.00	21,224	19.00	21,850	19.00	21,463	19.00	22,835	19.00	22,563
Business Transformation and Technology	222.72	43,402	219.72	44,402	218.72	43,508	218.72	46,066	218.72	39,880
Mineral Resources	101.60	11,041	101.60	11,175	101.60	10,556	103.60	34,483	106.10	10,841
Amortization and Other Costs Related to Capital Assets		6,776		6,624		7,464		8,284		8,209
TOTAL OPERATING	361.32	86,557	357.32	87,418	356.32	87,426	359.32	115,419	361.82	84,096
Expenditures Related to Capital Investment		8,099		8,618		4,766		3,855		9,021
TOTAL	361.32	94,656	357.32	96,036	356.32	92,192	359.32	119,274	361.82	93,117

* - Adjusted figures reflect historical data on a comparable basis in those appropriations affected by reorganizations during the five years

INNOVATION, ENERGY AND MINES
2012/13 Annual Report Performance Measurements

The following section provides information on key performance measures for the department for the 2012-13 reporting year.

Performance indicators in departmental Annual Reports are intended to complement financial results and provide Manitobans with meaningful and useful information about government activities, and their impact on the province and its citizens.

For more information on performance reporting and the Manitoba government, visit www.manitoba.ca/performance.

Your comments on performance measures are valuable to us. You can send comments or questions to mbperformance@gov.mb.ca.

Innovation, Energy and Mines 2012/13 Performance Measures Document for inclusion in the 2012/13 Annual Report

Priority: Create an environment conducive to the development of clean energy technologies and capitalize on energy opportunities for Manitobans.

What is being measured? (A)	How is it being measured (name of indicator)? (B)	Why is it important to measure this? (C)	What is the starting point? (baseline data and year) (D)	What is the most recent available data? (E)	What is the trend over time? (F)	Comments/recent actions/report links
We are measuring progress toward developing alternative energy sources for Manitoba.	Measuring the total amount of biodiesel consumption in Manitoba.	Measuring alternative energy resources not only demonstrates the importance of diversifying the province's reliance on a single energy source, but it also recognizes the importance of developing clean, renewable and sustainable energy resources.	2008 and 2009 – 100,000 litres.	First Reporting Period (April 1, 2010 – December 31, 2012) = 70,167,198 million litres.	Use of Manitoba and not-Manitoba sources facilitated timely achievement of target.	Six additional sites have been monitored to support the development of a Manitoba profile. The information is being used for communities and developers to further understand Manitoba's wind resource. Note this initiative was discontinued part way through the program due to BFO funding constraints. For more information, please see the press releases and reports below. Manitoba's Largest Wind Farm Powers Up http://news.gov.mb.ca/news/index.html?archive=&item=10621 MB Hydro progresses in evaluation of wind energy proposals. http://www.hydro.mb.ca/news/releases/news_08_03_31.html Province, Manitoba Hydro Unveil Expression of Interest To Develop 1,000 Megawatts of Wind Over the Next Decade – November 2005.

Priority: Improve public services by engaging Departmental service providers in the pursuit of continuous improvement through the examination of their business processes to develop and deliver more effective and efficient services while maximizing Manitoba's benefits from Information and Communication Technology investments.

What is being measured? (A)	How is it being measured (name of indicator)? (B)	Why is it important to measure this? (C)	What is the starting point? (baseline data and year) (D)	What is the most recent available data? (E)	What is the trend over time? (F)	Comments/recent actions/report links
# of BTT staff with Learning Plans	BTT Managers will report to BTT ADM on how many Learning Plans staff have completed.	Completed learning plans demonstrate that staff are interested in acquiring the skills and knowledge required to better perform their role and job within BTT. It also demonstrates that they want to help BTT and themselves reach their respective goals.	April 2013	N/A	**TBD** - Too soon to establish a trend.	
The interval of time between the receipt of a valid request for a new ICT service and the formal launch of the new service.	Measured from the time a Request for Service is received to the launch date of the service.	By shortening service launch intervals BTT can make more efficient use o staff and resources and provide services to clients departments on a timelier basis.	April 2012	Data Is collected in BTT's Service Request system on an ongoing basis.	**TBD** - Too soon to establish a trend.	
Number of requests received and prioritized.	We are piloting a prioritization tool which will assist in preparing requests of BTT and will assist BTT in identifying the work of the highest priority, assigning	It will help ensure that BTT is working on requests that generate value for government, be it through vitality exercises or transformational initiatives.	We have not used a prioritization process for non-capital requests in the past.	NA	NA	

What is being measured? (A)	How is it being measured (name of indicator)? (B)	Why is it important to measure this? (C)	What is the starting point? (baseline data and year) (D)	What is the most recent available data? (E)	What is the trend over time? (F)	Comments/recent actions/report links
	resources accordingly.					
Incremental number of communities with access to broadband or high-speed network services.	IEM uses a definition or community, based on Canadian Census data, which includes all cities, towns and rural municipalities.	To ensure IEM is fulfilling government's mandate to improve access to Internet and other Broadband Services throughout Manitoba.	Access to Broadband was limited in Manitoba and did not exist in rural and northern communities prior to September 2001.	Estimated community connectivity by year: 2004 104 2005 132 2006 200 2007 230 2008 255 2009 357 (356) 2010 360 (360) 2011 360 2012 415 Target 465 2011/12 showed an increase of 13.3% or 55 additional communities from the previous year of 360 communities.	Positive and increasing however connecting remaining communities will be challenging due to the high cost of connecting remote communities and the low revenue potential. Some communities listed as connected are under served due to a lack of network capacity or the high cost of services.	**Note:** Approximately 66 new communities were connected by December 31, 2011 from the 360 communities connected in Manitoba through Industry Canada's Broadband Canada Program. For more information, please see the documents below. This measure was reported on page 46 of *Reporting to Manitobans on Performance 2005 Discussion Document*, which is available at http://www.gov.mb.ca/finance/pdf/performance.pdf Industry Canada Broadband Program: http://www.ic.gc.ca/eic/site/719.nsf/eng/home

What is being measured? (A)	How is it being measured (name of indicator)? (B)	Why is it important to measure this? (C)	What is the starting point? (baseline data and year) (D)	What is the most recent available data? (E)	What is the trend over time? (F)	Comments/recent actions/report links
Process Development (includes work on creating, enhancing, updating processes)	Number of process documents posted in the Process Repository.	The measure provides a record of the progress made toward achieving the objective and ensures the work is being done.	2012 - Process Repository created; starting point is zero process documents.	2013 - Current number of process documents posted in the Repository.	The number of documents in the Process Repository will continue to rise until all process documentation has been posted.	
Policy Development	Availability of ICT policies and supporting policy instruments.	To ensure the proper governance and oversight of ICT in the Government of Manitoba.	Policy Gap Analysis (2011/2012)	Policy Gap Analysis (2011/2012)	Too soon to establish a trend	
Availability of a 5 year ICT Strategic Plan.	The 5 year strategic plan will be updated annually. Achievements of the organization will be assessed against the goals of the strategic plan	Improved tactical decisions that contribute to meeting government and divisional objectives	BTT strategic priorities document 2012, SAP 1/3/5 plan (updated 2012), Manitoba 2020 (Feb 2012), OAG.	None - Data will be assessed annually beginning in April 2013.	Too soon to establish a trend.	
Availability of a 5 year Capital and SAP Plan(s).	Business Transformation Executive Committee (BTEC) endorsed annual capital plan.	Improvement in ICT investments and reduced "Lapsed Capital".	Starting point data Fiscal 2011/12 Capital Plan. Year end capital expenditure report.	Fiscal 2012/13 Capital Plan. 2011/12	**TBD** - Too soon to establish a trend.	
Use of the Business Analysis (BA) Toolkit in projects by Departments.	Yearly review of the BA deliverables submitted by departments to BTT.	Improved analysis capability will result in improved systems requirements gathering and system scoping.	Starting point data will begin to be collected in fiscal 2013/2014 with projects undertaken by Application Development & Integration	N/A	Too soon to establish a trend.	

What is being measured? (A)	How is it being measured (name of indicator)? (B)	Why is it important to measure this? (C)	What is the starting point? (baseline data and year) (D)	What is the most recent available data? (E)	What is the trend over time? (F)	Comments/recent actions/report links
Application Portfolio Management enhancements.	Assessment analysis against an established baseline as presented in the Annual State of Application Renewal (SOAR) Report.	Improved decision making in regards to legacy applications maintenance costs.	Starting point for data analysis and baseline results completed 2012/13 fiscal year.	First Annual State of Application Renewal (SOAR) Report produced 2012/13 fiscal year.	Improved governance and decision making over the Manitoba Government application portfolio and aid in directing application legacy renewal efforts.	
Continue the implementation of the BTT Risk Management Framework.	Ongoing review and management of the BTT Risk Register	Ensure that risks are taken into account in decision making.	BTT Risk Register of 2011/2012.	Risk Register 2011/2012	Too soon to establish a trend.	
Increase in variety of mobile devices available to GoM employees	We will monitor the increase in the variety mobile devices available. We will also continue to report on new online services being launched for government program areas.	Having access to the appropriate devices in order to for staff to be productive wherever there helps create opportunities to create efficiencies and increase productivity.	April 2013	NA	Devices of a mobile nature are becoming increasingly powerful, thus creating opportunities for further product offerings to help generate opportunities for an increase in operational productivity.	

Priority: Improve and enhance Manitoba's scientific research capacity, the commercialization of research, and the growth and development of Manitoba's key knowledge based industries.

What is being measured? (A)	How is it being measured (name of indicator)? (B)	Why is it important to measure this? (C)	What is the starting point? (baseline data and year) (D)	What is the most recent available data? (E)	What is the trend over time? (F)	Comments/recent actions/report links
Research Competitiveness as measured by success in national competitions. 1)Manitoba Expenditures on matching federal R&D programs (i.e. CFI, GC, NCE and RPP) 2) MB Provincial Ranking re: CFI awards (% of Canadian total)	Indication of the capacity and competitiveness of Manitoba as a location to undertake leading research in areas of strength.	A key determinant of the province's ability to attract investment and highly qualified personnel for research-based businesses and research institutions	1) MB Expenditures 2003/04 - $6,941,000 2004/05 - $5,607,000 2005/06 - $6,424,000 2006/07 - $4,238,000 2007/08 - $6,210,000 2008/09 - $5,559,000 2009/10 - $5,613,000 2010/11 - $6,509,000 2011/12 - $8,115,666 2012/13 - $6,740,292 2) MB Provincial Ranking (Cumulative 98/99 – 2011/12) 1.53% - Rank 7th	There were 16 successful 2012/13 research projects in Manitoba under the federal Canada Foundation for Innovation (CFI) Leaders' Opportunity Fund (LOF) initiative. These projects, bring an investment of up to $2,840,917 to Manitoba's universities for equipment and research infrastructure, operating and maintenance of the equipment, and help Manitoba's institutions to recruit and retain the best faculty.	The level of funding has been steady over time with year to year variations.	The MRIF works with national funding organizations that provide matching funds to Manitoba. Please view the websites below: Canadian Foundation for Innovation (CFI) http://www.innovation.ca/index.cfm Genome Canada http://www.genomecanada.ca/
Quantitative and qualitative impacts of the Province's support for local knowledge commercialization and key knowledge based industries.	Economic impact and benefits to MB, generated in whole or in part by the Province's support Federal, industry and/or foreign investment leveraged by the Province's support Qualitative	It is important to show how the Province's support for knowledge commercialization and key knowledge based industries drive economic growth in Manitoba through innovation.	Quarterly reports will be prepared by the program area outlining investments in knowledge based industries. This data will be used to measure the outcomes for each indicator in Column B. Baseline data is being collected from current	NA	No trend yet established	

What is being measured? (A)	How is it being measured (name of indicator)? (B)	Why is it important to measure this? (C)	What is the starting point? (baseline data and year) (D)	What is the most recent available data? (E)	What is the trend over time? (F)	Comments/recent actions/report links
	reporting and assessment by stakeholders on impacts of the Province's support		knowledge based industry statistics and reporting on the Province's support to commercialization and knowledge based industry stakeholders in 2012/13.			

Priority: Increase Manitoba's geological knowledge base, expand Manitoba's mineral investment opportunities, and realize Manitoba's oil and gas exploration and development potential

What is being measured? (A)	How is it being measured (name of indicator)? (B)	Why is it important to measure this? (C)	What is the starting point? (baseline data and year) (D)	What is the most recent available data? (E)	What is the trend over time? (F)	Comments/recent actions/report links
			2002 Petroleum exploration and development capital expenditures (dollar value millions) in Manitoba and millions and annual expenditure change: $65.6 (35.5%)	Petroleum exploration and development costs: 2008: $263 million on total expenditures of $431 million; 2009: $287 million on total expenditures of $452 million 2010: $851million of total expenditures 1.08 billion 2011: $881 million of total expenditures of $1.3 billion 2012:$918 million estimate on total expenditures of $1.36 billion	Petroleum exploration and development capital expenditures (dollar value millions) in Manitoba (annual expenditure change): 2002: $65.6 (up 35.5%) 2003: $68.9 (up 5%) 2004: $82.4 (up 19.6%) 2005: $167.6 (up 103.4%) 2006: $282.1 (up 68.3%) 2007: $232 (down 17.8%) 2008: $263.0 (up 13.4%) 2009: $287 (up 9.13%) 2010: $851 (estimate up 196.5%) 2011: $881 million (up 3.53% 2012 Estimate: $918 million up (4.2%) Continuing high oil prices, ongoing development of Daly Sinclair oil field and the success of new horizontal well completion technology in the Waskada area have resulted in an increase in exploration and development expenditures in 2012.	Canadian Association of Petroleum Producers (CAPP) captures and compiles oil industry WCSB exploration and development expenditures by province. The expenditures exclude oil sands projects. Over the past 5 years, CAPP exploration and development expenditures have averaged 49.6% of total oil industry expenditures in Manitoba as estimated by the Department. Projections for 2010 are not available from CAPP. For 2010, the Department estimates total oil industry expenditures of $895 million and exploration and development expenditures are estimated at $444 million (49.6% of Dept estimate).

Notes:

Column A – Describe the output or outcome being measured and the indicator used to measure it.

Column B – How does the measure show progress? Measures could link to more than one priority for the department. Some indicators may be lagging (describing outcomes after the fact) and others may be leading (a preview of possible outcomes, which may allow time for the department to adjust).

Column C – This is the *starting point* of this measure (or closest available). This is the baseline.

Column D – Sometimes measures may be available only after a certain period of time has elapsed. Measures directly applicable to activities in the current fiscal year may not yet be available, meaning that the next best available information should be used, with its date included.

Column E – Indicate direction, using words such as "stable", "increasing", "decreasing", "improving", "worsening", "variable", or "no trend yet established". Also, indicate the point in time from which the measure starts. Use trend history (where consistent historical data are not yet available, indicates as such or advise that it is new).

The Public Interest Disclosure (Whistleblower Protection) Act

The Public Interest Disclosure (Whistleblower Protection) Act came into effect in April 2007. This law gives employees a clear process for disclosing concerns about significant and serious matters (wrongdoing) in the Manitoba public service, and strengthens protection from reprisal. The Act builds on protections already in place under other statutes, as well as collective bargaining rights, policies, practices and processes in the Manitoba public service.

Wrongdoing under the Act may be: contravention of federal or provincial legislation; an act or omission that endangers public safety, public health or the environment; gross mismanagement; or, knowingly directing or counselling a person to commit a wrongdoing. The Act is not intended to deal with routine operational or administrative matters.

A disclosure made by an employee in good faith, in accordance with the Act, and with a reasonable belief that wrongdoing has been or is about to be committed is considered to be a disclosure under the Act, whether or not the subject matter constitutes wrongdoing. All disclosures receive careful and thorough review to determine if action is required under the Act, and must be reported in a department's annual report in accordance with Section 18 of the Act.

Information Required Annually (per Section 18 of The Act)	**Fiscal Year 2012 – 2013**
The number of disclosures received, and the number acted on and not acted on. *Subsection 18(2)(a)*	**NIL**
The number of investigations commenced as a result of a disclosure. *Subsection 18(2)(b)*	**NIL**
In the case of an investigation that results in a finding of wrongdoing, a description of the wrongdoing and any recommendations or corrective actions taken in relation to the wrongdoing, or the reasons why no corrective action was taken. *Subsection 18(2)(c)*	**NIL**

PART B - CAPITAL INVESTMENT

Capital Investment is provided in the Estimates of Expenditures under Part B. For the year ended March 31, 2013, the department's capital authority provided for the acquisition, development and enhancement of government's information communication and technology. Support for internal reform initiatives involving the use of information technology in the delivery of government's services are reported separately.

Part B - CAPITAL INVESTMENT

Expenditures by Sub-Appropriation	Actual 2012/13 $	Estimate 2012/13 $	Variance Over (Under)	Expl. No.
B.6(a)(1) – Enterprise System	6,753	6,870	(117)	
B.6(a) (2) – Other Information Technology	-	-		
B.6(a) (3) – Corporate Information Technology Projects	2,268	2,190	78	
Total Capital Investment	**9,021**	**9,060**	**(39)**	

APPENDIX A

ASSOCIATED AGENCIES, BOARDS, COMMISSIONS and COUNCILS

ECONOMIC INNOVATION TECHNOLOGY COUNCIL

The Economic Innovation and Technology Council (EITC) acts as a catalyst in establishing partnerships and alliances for increased economic development through innovation. EITC tables its annual report under separate cover with the Manitoba Legislature.

INDUSTRIAL TECHNOLOGY CENTRE

The Industrial Technology Centre (ITC) is a special operating agency of the Department of Innovation, Energy and Mines. The Department supports ITC's contribution to economic development activities in Manitoba via an Economic Development Contribution Agreement (a performance contract). ITC provides a wide range of technical services in support of technology based economic development in Manitoba. ITC tables its annual report under separate cover with the Manitoba Legislature.

MANITOBA EDUCATION, RESEARCH AND LEARNING INFORMATION NETWORKS

The Manitoba Education, Research and Learning Information Networks (MERLIN), is a special operating agency of the Department of Innovation, Energy and Mines. MERLIN tables its annual report under separate cover with the Manitoba Legislature.

MANITOBA GAMING CONTROL COMMISSION

The Manitoba Gaming Control Commission is the primary regulatory body responsible to ensure that gaming activities are conducted with honesty, integrity and in the public interest. The Manitoba Gaming Control Commission tables its annual report under separate cover with the Manitoba Legislature.

MANITOBA HEALTH RESEARCH COUNCIL

The Manitoba Health Research Council (MHRC) provides funding for health research initiatives. The Manitoba Health Research Council tables its annual report under separate cover with the Manitoba Legislature.

MINING BOARD

The board arbitrates disputes with respect to accessing of minerals other than oil and gas. The board can hear and resolve dispute between holders of mineral dispositions and between holders and officers of the Departments. The board can also advise on matters relating to the pooling of mineral operations and to the designation of land as limited use land.

SURFACE RIGHTS BOARD

The Surface Rights Act establishes a Quasi-judicial board to administer and enforce the Surface Rights Act. Responsible for resolving land access and development disputes between oil and gas development proponents and surface rights holders. The Board also arbitrates and mediates disputes and establishes appropriate compensation for petroleum activities.

APPENDIX B

FINANCIAL INFORMATION

Innovation, Energy and Mines
Summary of Business Assistance
2012-2013 Fiscal Year

MANITOBA CENTRES OF EXCELLENCE FUND	720,000
MANITOBA RESEARCH AND INNOVATION FUND	12,377,260
LESS: RECOVERABLE FROM URBAN DEVELOPMENT	(750,000)
TRANSFER PAYMENTS	7,298,400
MINERAL INDUSTRY SUPPORT PROGRAMS:	
Mineral Exploration Assistance Program	
Manitoba Prospectors' Assistance Program	5,329
	$19,650,989

APPENDIX C

FINANCIAL INFORMATION

Innovation, Energy & Mines
List of Business Assistance
2012-2013 Fiscal Year

MANITOBA PROSPECTORS' ASSISTANCE PROGRAM

William Hood	2,546
Ken Klyne	2,783
Total Funds Dispersed:	$5,329